Sequence

116, App 116, App 116, App 117, App 115, App 115, App 115, App 115, App 115, App 117, App 118, App 119, A

Sequence

```
Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM nucleic - nucleic search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ĕ
            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Issued_Patents_NA:*

1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/backfiles1.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-001-737-7
1661
1 GAATTCGGCTTCAT
      IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     November 9, 2001, 09:52:24; Search time 50.87 Seconds (without alignments) 7394.927 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 351203 seqs, 113238999 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATTCGGCTTCATATGGCA.....TGGGCGGATAAGCCGAATTC 1661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore version
Copyright (c) 1993 - 2000
      2284
4403765
44103765
441103765
1626
1626
11569
11569
11569
11569
11569
11569
11569
11560
11520
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
11620
                                                                                                                                                                                                                                                                                                                                                       1647
4524
1838
1838
1838
                                                                                                                                                                                                                                                                                                                                                                                                                                                    BB
   US-09-472-971-5

US-09-472-971-7

US-08-470-260-7

US-08-471-491-7

US-08-46-62-7

US-08-466-248-269-28

US-08-432-697-28

US-09-103-840A-1

US-09-103-840A-1

US-09-103-840A-1

US-09-97-162-159

US-08-997-080-159

US-08-997-080-131

US-08-997-362-131

US-08-997-362-131

US-08-461-775-1

US-09-031-606-1

US-09-031-606-8

US-08-967-362-161

US-08-997-362-161

US-08-997-362-161

US-08-997-362-161

US-08-997-362-161
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   702406
 Sequence 5, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 28, Appli
Sequence 28, Appli
Sequence 28, Appli
Sequence 28, Appli
Sequence 29, Appli
Sequence 15, Appli
Sequence 15, Appli
Sequence 113, Appli
Sequence 113, Appli
Sequence 113, Appli
Sequence 111, Appli
Sequence 111, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 16, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/472,971
CURRENT FILING DATE: 1999-12-28
EARLIER APPLICATION NUMBER: JP10-372965
EARLIER FILING DATE: 1998-12-28
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 5
LENGTH: 1647
TYPE: DNA
ORGANISM: Escherichia coli
US-09-472-971-5
   밁
                           δÃ
                                                               밁
                                                                                      · Q
                                                                                                                            밁
                                                                                                                                                      ρ
                                                                                                                                                                                      망
                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                  οy
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1
US-09-472-971-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: SOGO, KRZUYO
APPLICANT: YANAGI, Hideki
APPLICANT: YANAGI, Hideki
APPLICANT: YURA, Takashi
TITLE OF INVENTION: TRIGGER FACTOR EXPRESSION PLASMIDS
FILE REFERENCE: 1422-499P
                                                                                                                                                                                                                                                                                                                                                                             Query Match 35.5%;
Best Local Similarity 61.3%;
Matches 986; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 5, Application US/09472971 Patent No. 6197547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                307
                                318
                                                                                                                                                         198
                                                                                              258
                                                                                                                            187
                                                                                                                                                                                          127
                                                                                                                                                                                                                         138
                                                                                                                                                                                                                                              67 ctggcagatgcagtgaaagttaccctcggtccaaaaggccgtaacgtagttctggataaa
                                                                                                                                                                                                                                                                                                                                18 GCAAAAGAAATCAAATTTTCAGCAGATGCGCGTGCTGCCATGGTGCGCGGGAGTTTGATATG
                                                                                                                                                                                                                                                                                   78
                                                                                                                                                                                                                                                                                                                  7
                                                                                                                                         GAAGATCATTTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAACCAAT
                                                                                                                                                                                                      GCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCGAATTA 197
                                                                                                                                                                                                                                                                TTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGGGCGAATGTTGTTCTTGAAAAA 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGACTAAAAAAATGTGACAGCAGGTGCTAATCCAATTTGGTATCCGTCGAGGCATTGAAACA
                                                                           GATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTTGACACACAAGCCATTGTTCATGAA
                                                                                                                                                                                   totttoggtgcaccgaccatcaccaaagatggtgtttccgttgctcgtgaaatcgaactg
                                                                                                                                                                                                                                                                                                             gctaaagacgtaaaattcggtaacgacgctcgtgtgaaaatgctgcgcggcgtaaacgta
ggtctgaaagctgttgctgcgggcatgaacccgatggacctgaaacgtggtatcgacaa
                                                              gacgctgcaggcgacggtaccaccactgcaaccgtactggctcaggctatcatcactgaa
                                                                                                                       gaagacaagttcgaaaatatgggtgcgcagatggtgaaagaagttgcctctaaagcaaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 20000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-997-080-116
US-08-997-362-116
US-09-095-855-116-51
US-09-265-315-51
US-09-265-315-51
US-09-265-315-51
US-09-265-315-51
US-09-265-315-51
US-09-97-362-115
US-08-97-362-77
US-08-97-362-77
US-08-97-362-77
US-08-97-362-77
US-08-105-168B-22
US-08-105-168B-22
US-08-473-020A-31
                                                                                                                                                                                                                                                                                                                                                                             Score 589.8; DB 4;
Pred. No. 1.3e-164;
0; Mismatches 617;
                                                                                                                                                                                                                                                                                                                                                                                                            DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                          Length 1647;
                                                                                                                                                                                                                                                                                                                                                                               Indels
```

6; Gaps

2

126

66 7.7

```
1275
                                                                                                                                                                                                  1207
                                                                                                                                                                                                                                 1215
                                                                                                                                                                                                                                                                                1155 GCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAAATGCT 1214
                                                                                                                                                                                                                                                                                                                             1087
                                                                                                                                                                                                                                                                                                                                                            1095
                                                                                                                                                                                                                                                                                                                                                                                                                          1035
                                                                                                                                                                                                                                                                                                                                                                                             1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                         967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               675 ACGGATAAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACTTGAGGAAGTTCTTAAA 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          367
                                                                                                                                                                                                             ACACGTGCAGCCGTTGAÀGAAGGTATCGTTGCTGGTGGTGGAACAGCACTTATTACGGTT
tctgttgttgctaacaccgttaaaggcggcgacggcaactacggttacaacgcagcaacc 1446
                        TCCGTAGTTATTGACAAGTTGAAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAACA 1451
                                                              gcactgcgtgcaatggaagctccgctgcgtcagatcgtattgaactgcggcgaagaaccg 1386
                                                                                 GTGCTTCGTGCTCTAGAAGAGCCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAGGC
                                                                                                                          gcgtctaaactggctgacctgcgtggtcagaacgaagaccagaacgtgggtatcaaagtt
                                                                                                                                                           ATTGAAAAAGTAGCAGCTCTTGAGCTTGAGGCGATGATGCTACTGGACGTAACA---TT
                                                                                                                                                                                        acccgtgctgcggtagaagaaggcgtggttgctggtggtggtgttgcgctgatccgcgta
                                                                                                                                                                                                                                                    gctgctaccgaagttgaaatgaaagagaaaaagcacgcgttgaagatgccctgcacgcg
                                                                                                                                                                                                                                                                                                                  gaaaaactgcaggaacgcgtagcgaaactggcaggcggcgttgcagttatcaaagtgggt 1146
                                                                                                                                                                                                                                                                                                                                     GAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGGTGTGAGCTGTTATCAAAGTAGGA 1154
                                                                                                                                                                                                                                                                                                                                                                                cagggccgtgttgctcagatccgtcagcagattgaagaagcaacttctgactacgaccgt
                                                                                                                                                                                                                                                                                                                                                                                                                GCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACATCTGGACTTTGACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                             gttgtgatcaacaaagacaccaccactatcatcgatggcgtgggtgaagaagctgcaatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAGCTATT 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCTGCTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGATTTGGT 854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gaagagatcggtatggagctggaaaaagcaaccctggaagacctgggtcaggctaaacgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATCGTCGTAAAGCTATGCTTGAAGACACTTGCTATCTTGACAGGTGGTACAGTGATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gttgttaacaccattcgtggcatcgtgaaagtcgctgcggttaaagcaccgggcttcggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gcaggcaaaccgctgctgatcatcgctgaagatgtagaaggcgaagcgctggcaactgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCAACCGTCCATTACTCATATTGCAGATGATGTGGATGGTGAAGCACTTCCAACCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gctgacaagaaaatctccaacatccgcgaaatgctgccggttctggaagctgttgccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAACCCATTTATCTTAATC 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ctgcaggacgaactggacgtggttgaaggtatgcagttcgaccgtggctacctgtctcct 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGATTACCATCGAAGAATCTCGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tacttcatcaacaagccggaaactggcgcagtagaactggaaagcccgttcatcctgctg 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGTCTCAA 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gctgaagcgatggacaaagtcggtaaagaaggcgttatcaccgttgaagacggtaccggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gcgattgctcaggttggtaccatctccgctaactccgacgaaaccgtaggtaaactgatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTATTGCTCAGGTCGCTGCAGTATCATCACGCTC-:-TGAAAAAGTTGGAGAGTATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAACAGCAACAGCTGTTGAAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCAAGGAA
                                                                                              1391
                                                                                                                                                            1331
                                                                                                                                                                                           1266
                                                                                                                                                                                                                          1274
                                                                                                                               1326
                                                                                                                                                                                                                                                        1206
                                                                                                                                                                                                                                                                                                                                                                                    1086
                                                                                                                                                                                                                                                                                                                                                                                                                 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  437
             밁
                                           Ş
                                                                           밁
                                                                                                         Ş
                                                                                                                                         B
                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                          δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
               608
                                              438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1447
                                                                           749
                                                                                                            378
                                                                                                                                         689
                                                                                                                                                                       318
                                                                                                                                                                                                        629
                                                                                                                                                                                                                                                                                                                                  509
                                                                                                                                                                                                                                                                                                                                                                                                                                                            389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1507
```

문 S 밁 õ 밁 δÃ 밁 Ş 밁 Ş B S 밁 Ş 밁 õ 밁 Ş 밁 õ 밁 õ 밁 õ 밁 õ 밁 á

Š

495

TCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGTGATTACCATCGAAGAATCTCGAGGT

```
; LENGTH: 4524
TYPE: DNA
; ORGANISM: Escherichia coli
US-09-472-971-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-472-971-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/472,971
CURRENT FILING DATE: 1999-12-28
EARLIER APPLICATION NUMBER: JP10-372965
EARLIER FILING DATE: 1998-12-28
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 35.5%;
Best Local Similarity. 61.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 7, Application US/09472971
Patent No. 6197547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: SOGO, Kazuyo
APPLICANT: YANAGI, Hideki
APPLICANT: YURA, TAKIGEKI
TITLE OF INVENTION: TRIGGER FACTOR EXPRESSION PLASMIDS
FILE REFERENCE: 1422-409P
                                                                                                                                                                                                                                                                                            258 GATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAGCCATTGTTCATGAA 317
                                                                                                                                                                                                                                                                                                                                                   569 gaagacaagttcgaaaatatgggtgcgcagatggtgaaagaagttgcctctaaagcaaac 628
                                                                                                                                                                                                                                                                                                                                                                                 198 GAAGATCATTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAACCAAT 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      138 GCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCGAATTA 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  449 ctggcagatgcagtgaaagttaccctcggtccaaaaggccgtaacgtagttctggataaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1567 gacctgccgaaaaacgatgcagctgacttaggcgctgctggcggtatgg 1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1572 AATAAACCTGAACCAGCTACGCCAGCGGCGAGCAATGCCAGCAGGTATGG 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             78 TTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTGAAAAA 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18 GCAAAAGAAATCAAATTTTCAGCAGATGGGCGTGCTGCCATGGTGCGCGGGAGTTGATATG 77
                                                                                                                                                                                                       GGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTGAAACA 377
                        GCTATTGCTCAGGTCGCTGCAGTATCATCACGCTC----TGAAAAAGTTGGAGAGTATATC
                                                                                  gcggttaccgctgcagttgaagaactgaaagcgctgtccgtaccatgctctgactctaaa
                                                                                                               GCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCAAGGAA 437
                                                                                                                                                                         ggtctgaaagctgttgctgcgggcatgaacccgatggacctgaaacgtggtatcgacaaa
                                                                                                                                                                                                                                                              gacgctgcaggcgacggtaccaccactgcaaccgtactggctcaggctatcatcactgaa
gcgattgctcaggttggtaccatctccgctaactccgacgaaaccgtaggtaaactgatc
                                                                                                                                                                                                                                                                                                                                                                                                                                           tctttcggtgcaccgaccatcaccaaagatggtgtttccgttgctcgtgaaatcgaactg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gctaaagacgtaaaattcggtaacgacgctcgtgtgaaaatgctgcgggggtaaacgta 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGCTTCAAAATGCAGCTTCTGTAGCTAGTCTTATTTTGACAACAGAAGCAGTTGTTGCT 1571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGATCA 1511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 589.8;
Pred. No. 2.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.3e-164;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      617;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 4524;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6
  868
                                           494
                                                                                       808
                                                                                                                                                                            748
                                                                                                                                                                                                                                                                   688
                                                                                                                                                                                                                                                                                                                                                                                                                                                568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2
```

문

```
1469 gaaaaactgcaggaacgcgtagcgaaactggcaggcggcgttgcagttatcaaagtgggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1095 GAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGGTGTAGCTGTTATCAAAGTAGGA 1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1275 ATTGAAAAAGTAGCAGCTCTTGAGCTTGAGGGCGATGATGCTACTGGACGTAACA---TT 1331
     AATAAACCTGAACCAGCTACGCCAGCCAGCAGTGCCAGCAGGTATGG
                                                                                                                                                                                                                GGTGAGTGGGTTGATATGATTAAAAACAGGAATCATTGACCCTGTCAAAGTAACACGATCA 1511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gcgtctaaactggctgacctgcgtggtcagaacgaagaccagaacgtgggtatcaaagtt 1708
                                                                          gctctgcagtacgcagcttctgtggctggcctgatgatcaccaccgaatgcatggttacc
                                                                                                            GCGCTTCAAAATGCAGCTTCTGTAGCCTAGTCTTATTTTGACAACAGAAGCAGTTGTTGCT 1571
                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGCTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAGGC 1391
                                                                                                                                                                              tctgttgttgctaacaccgttaaaggcggcgacggcaactacggttacaacgcagcaacc 1828
                                                                                                                                                                                                                                                                                                                                    TCCGTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAACA 1451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCACTTATTACGGTT 1274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACTTCTGACTTTGACCGT 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATCGTCGTAAAGCTATGCTTGAAGACATTGCTATCTTGACAGGTGGTACAGTGATTACA 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGGGCCAGGATTTGGT 854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACGGATAAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACCTGAGGAAGTTCTTAAA 734
                                                                                                                                                                                                                                                                                                                                                                                    gcactgcgtgcaatggaagctccgctgcgtcagatcgtattgaactgcggcgaagaaccg 1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         acccgtgctgcggtagaagaaggcgtggttgctggtggtggtgttgcgctgatccgcgta 1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gctgctaccgaagttgaaatgaaagagaaaaaagcacgcgttgaagatgccctgcacgcg 1588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAAATGCT 1214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cagggccgtgttgctcagatccgtcagcagattgaagaagcaacttctgactacgaccgt 1468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gttgtgatcaacaaagacaccaccactatcatcgatggcgtgggtgaagaagctgcaatc 1408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAGCTATT 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gaagagatcggtatggagctggaaaaagcaaccctggaagacctgggtcaggctaaacgt 1348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCTGCTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gatcgtcgtaaagctatgctgcaggatatcgcaaccctgactggcggtaccgtgatctct 1288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gttgttaacaccattcgtggcatcgtgaaagtcgctgcggttaaagcaccgggcttcggc 1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gcaggcaaaccgctgctgatcatcgctgaagatgtagaaggcgaagcgctggcaactgct 1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCAACCGTCCATTACTCATTATTGCAGATGATGTGGATGGTGAAGCACTTCCAACCCTT 794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gctgacaagaaaatctccaacatccgcgaaatgctgccggttctggaagctgttgccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tacttcatcaaccagccggaaactggcgcagtagaactggaaagcccgttcatcctgctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAACCCCATTTATCTTAATC 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ctgcaggacgaactggacgtggttgaaggtatgcagttcgaccgtggctacctgtctcct 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGTCTCAA 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gctgaagcgatggacaaagtcggtaaagaaggcgttatcaccgttgaagacggtaccggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   928
Š
                                                 밁
                                                                                              δÃ
                                                                                                                                                     밁
                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TOPOLOGY: 1; MOLECULE TYPE: US-08-470-260-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-470-260-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 31.8%; Score 528.6; DB 3; Best Local Similarity 58.9%; Pred. No. 1.7e-146; Matches 966; Conservative 0; Mismatches 664;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 7, Application US/08470260 Patent No. 6077706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 03
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 21-OCT-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1949 gacctgccgaaaaacgatgcagctgacttaggcgctgctggcggtatgg 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                 236 AATTAAGTTGCCCAGTAGCTAACATGGGCGCTCAACTCGTTAAAGAAGTAGCGAGCAAAA
                                                                                193 AATTAGAAGATCATTTTGAAAACATGGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAA 252
                                                                                                                                                   176 AAAAAAGCTATGGCGCTCCAAGCATCACCAAAGACGCGTGAGCGTGGCTAAAGAGATTG
                                                                                                                                                                                 133 AAAAAGCTTTTGGTTCTCCCCTTAATTACTAATGACGGGGTAACCATTTGCTAAAGAGATCG
                                                                                                                                                                                                                                                    116 GGCAACTCCATGACGCTGTCAAAGTAACCATGGGGCCCAAGAGGCAGGAATGTATTGATCC 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NPPLICANT: Rappuoli, Rino
NITLE OF INVENTION: Helicobacter Pylori Proteins
NITLE OF INVENTION: for Vaccines and Diagnostics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                         73
                                                                                                                                                                                                                                                                                                                                                     56 AAATGGCAAAAGAAATCAAATTTTCAGATAGTGCGAGAAACCTTTTATTTGAAGGCGTGA 115
                                                                                                                                                                                                                                                                                                                                                                                                       13 ATATGCCAAAAGAAATCAAATTTTCAGCAGATGCGCGTGCTGCCATGGTGCGCGGAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: McClung, Barbara G
REGISTRATION NUMBER: 33,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Emeryville
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
CCAATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAGCCATTGTTC 312
                                                                                                                                                                                                                                                                                ATATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTG 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid
DEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94608-2916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Chiron Corporation
4560 Horton Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Telford, John
Macchia, Glovanni
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bugnoli, Massimo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Covacci,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (510)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  655-3542
7:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601-2708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for Vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antonello
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US 08/256,848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/470,260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0316.001
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1838;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                            9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                   235
                                                 295
                                                                                                                                                                                                     192
                                                                                                                                                                                                                                                                                                                                                                                                          72
```

Ş

1572

밁 Š 밁

1512

Ş

1452

밁 Ş

1769

1392 1709 Ş 吊

1332

Ψ

1649

밁 Ş 밁

1589 1215 1529 1155 밁

S 밁 õ 8 õ В

1409 1035 1349 용 Ş 밁 Ş 문 S 吊 Ş 용 õ

1169

795

1109

735

1049 675

989 615

929 555 869

1229

855

1289

```
밁
                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                         1330
                                                     1316
                                                                                    1270
                                                                                                                                             1210
                                                                                                                                                                        1196
                                                                                                                                                                                        1150 TAGGAGCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAA 1209
                                                                                                                                                                                                                                                                1090
                                                                                                                                                                                                                                                                                1076 ATGTTAAAGACAGAGTCGCGCAGATCAAAACCCCAAATTGCAAGTACGACAAGCGATTATG
                                                                                                                                                                                                                                                                                                                                                        1016
                                                                                                                                                                                                                                                                                                                                                                                   970
                                                                                                                                                                                                                                                                                                                                                                                                                956
                                                                                                                                                                                                                                                                                                                                                                                                                                 910 TTACAGAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                            896 TTGGGGACAGAAGAAAGAATGCTCAAAGACATCGCTATTTTAACCGGCGGTCAAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       536 TCATCGCTGACGCTATGGAAAAAGTGGGTAAAGACGGCGTGATCACCGTTGAGGAAGCTA 595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           296
TTGTGCTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAG
                                          GCGCGGCTCAAAAAGT---GCATTTGAATTTGCACGATGATGAAAAAGTGGGCTATGAAA
                                                                                                  GCGCGACTAAAGCGGCGGTTGAAGAAGGCATTGTGATTGGTGGCGGTGCGGGCTCTCATTC 1315
                                                                CGGTTATTGAAAAAGTAGCAGCTCTTGAGCTTGAGGGCGATGATGCTACTGGACGTAACA 1329
                                                                                                                    ATGCTACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCACTTATTA 1269
                                                                                                                                                             TGGGCGCTGCGAGTGAAGTGGAAATGAAAGAGAAAAAAAGACCGGGTGGATGACGCGTTGA
                                                                                                                                                                                                                                         ACCGTGAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGGTGACCTGTTATCAAAG
                                                                                                                                                                                                                                                                                                       CTATTGCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACTTCTGACTTTG
                                                                                                                                                                                                                                                                                                                                           GAAGGATTGTGATTGACAAAGACAACACCACGATCGTAGATGGCAAAAGGCCATAGCGATG
                                                                                                                                                                                                                                                                                                                                                              CTAAGATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                   TTAGCGAAGAATTGGGCTTGAGTCTAGAAAACGCTGAAGTGGAGTTTTTAGGCAAAGCTG
                                                                                                                                                                                                                      ACAAAGAAAATTGCAAGAAAGATTGGCTAAACTCTCTGGCGGTGTGGCTGTGATTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGGTGATCGTCGTAAAGCTATGCTTGAAGACATTGCTATCTTGACAGGTGGTACAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCTAGTGGTGAATAAATTAAGAGGCGTGTTGAATATCGCAGCGGTTAAAGCTCCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCTTGTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTAAAACCAACCGTCCATTACTCATTATTGCAGATGTGGATGGTGAAGCACTTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTAACGGATAAAAAATCTCTAGCATGAAAGACATTCTCCCGCTACTAGAAAAAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAATCACGGATAAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACTTGAGGAAGTTC 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAAAGAGGGCAAACCGCTTTTAATCATCGCTGAAGACATTGAGGGCGAAGCTTTAACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCTTATTTTGTAACGAACGCTGAGAAAATGACCGCTCAATTGGATAATGCTTACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCAATACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAACCCCATTTATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATCTCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGATTACCATCGAAGAATCTC 549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATAAAGCTGCTGAAGCGATCATTAATGAGCTTAAAAAAAGCGAGCAAAAAAGTAGGCGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGAAGAAATCACCCAAGTGGCGACCATTTCTGCAAACTCCGATCACAATATCGGGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGAAGCTATTGCTCAGGTCGCTGCAGTATCATCACGCTC---TGAAAAAGTTGGAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCA 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAAGGTTTGAGGAATATCACGGCTGGGCTAACCCTATTGAAGTGAAACGAGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGAAGGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCTGATGCTGCCGGCGATGGCACGACCACAGCGACCGTGGTAGCTTATAGCATTTTA
                                                                                                                                                               1255
                                                                                                                                                                                                                       1195
                                                                                                                                                                                                                                                   1149
                                                                                                                                                                                                                                                                                  1135
                                                                                                                                                                                                                                                                                                             1089
                                                                                                                                                                                                                                                                                                                                            1075
                                                                                                                                                                                                                                                                                                                                                                        1029
                                                                                                                                                                                                                                                                                                                                                                                                     1015
                                                                                                                                                                                                                                                                                                                                                                                                                                  969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             909
                                                                                                                                                                                                                                                                                                                                                                                                                                                               955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 355
```

```
Sequence 7, Application US/08471491B

Patent No. 6090611

GENERAL INFORMATION:

APPLICANT: COVACCI, Antonello
APPLICANT: Telford, John
APPLICANT: Macchia, Glovanni
APPLICANT: Macchia, Glovanni
APPLICANT: Rappuoli, Rino

TITLE OF INVENTION: Helicobacter Pylori Proteins Useful For Vaccines and
FILLE OF INVENTION: Helicobacter Pylori Proteins Useful For Vaccines and
FILE OF INVENTION UNDBER: US/08/471,491B

CURRENT APPLICATION NUMBER: US/08/471,491B

NUMBER OF SEQ ID NOS: 8

SOFTMARE: Patentin Ver. 2.1

SEQ ID NO 7

LENGTH: 1838

TYPE: DNA
ORGANISM: Helicobacter pylori
US-08-471-491-7
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 4
US-08-471-491-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1670 GTATGGGAGGCATGGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1493 ATGGCAAGTATGTGGATATGTTTAAAGAAGGCATTATTGACCCCCTTAAAAGTAGAAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1390 GCTCCGTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1373 TCATCATGCGCGCCATTAAAGCCCCCATTAGCTCAAATCGCTATCAACGCTGGTTATGATG 1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -GCATGAAATCAAAGAAGAAAAAAGCGACTCCGGCAATGCCTGATATGGGTGGCATGGGCG 1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAATANACCTGAACCAGCTACGCCAGCGCAGCAATGCCAGCAGGTATGGATCCAGGAA 1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGATGGGTGGGATGGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCGCTCTACAAAATGCGGTTTCGGTTTCAAGCCTGCTTTTAACCACAGAAGCCACCGT--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCGCTTCAAAATGCAGCTTCTGTAGCTAGTCTTATTTTGACAACAGAAGCAGTTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGGTGAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGAT 1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCGGTGTGGTCGTGAATGAAGTAGAAAAAACACGAAGGGCATTTTGGTTTTAACGCTAGCA 1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1610
```

```
δÃ
                                                   밁
                                                                             Ş
                                                                                                          밁
                                                                                                                                  δÃ
                                                                                                                                                                   В
                                                                                                                                                                                           ρ
                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 966
                         313
                                                     296
                                                                                253
                                                                                                            236
                                                                                                                 193 AATTAGAAGATCATTTTGAAAACATGGGAACAATTGGTGTCTGAAGTGGCTTCTAAAA 252
                                                                                                                                                      176 aaaaaagctatggcgctccaagcatcaccaaagacggcgtgagcgtggctaaagagattg
                                                                                                                                                                           133 AAAAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCG
                                                                                                                                                                                                               116 ggcaactccatgacgctgtcaaagtaaccatggggccaagaggcaggaatgtattgatcc
                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                    13 ATATIGGCAAAAGAAATCAAATTTTCAGCAGATGCGCGTGCTGCCATGGTGCGCGGAGTTG
ATGAAGGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTG
                                          ccgctgatgctgccggcgatggcacgaccacagcgaccgtgctagcttatagcattttta
                                                          CCAATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAGCCATTGTTC
                                                                                                 aattaagttgcccagtagctaacatgggcgctcaactcgttaaagaagtagcgagcaaaa
                                                                                                                                                                                                                                ATATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGCGCGCAATGTTGTTCTTG
                                                                                                                                                                                                                                                                        aaatggcaaaagaaatcaaatttttcagatagtgcgagaaaccttttatttgaaggcgtga 115
                                                                                                                                                                                                                                                                                                                                      al Similarity 58.9
966; Conservative
                                                                                                                                                                                                                                                                                                                                   Score 528.6; DB 3;
Pred. No. 1.7e-146;
0; Mismatches 664;
                                                                                                                                                                                                                                                                                                                                  9;
                                                                                                                                                                                                                                                                                                                                Gaps
                 372
                                            355
                                                                      312
                                                                                                   295
                                                                                                                                                          235
                                                                                                                                                                                                                                             132
                                                                                                                                                                                      192
                                                                                                                                                                                                                  175
                                                                                                                                                                                                                                                                                                       72
```

31.8%; 58.9%;

Length 1838;

ω

밁 S

Ş

Ş 용

밁 Ş 문 Ş

```
1390 GCTCCGTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAA 1449
                                                                                                              1373
                 1433
                                                                                                                                        1330 TTGTGCTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAG 1389
                                                                                                                                                                                                                     1270 CGGTTATTGAAAAAGTAGCAGCTCTTGAGCTTGAGGGCGATGATGCTACTGGACGTAACA 1329
                                                                                                                                                                                                                                                                                                                                                                                              1196
                                                                                                                                                                                                                                                                                                                                                                                                                                            1150
                                                                                                                                                                                                                                                                                1256 gcgcgactaaagcggcggttgaagaaggcattgtgattggtgggggtgggggctctcattc 1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1076 atgttaaagacagagtcgcgcagatcaaaacccaaattgcaagtacgacaagcgattatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1030 CTATTGCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACTTCTGACTTTG 1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1016 gaaggattgtgattgacaaagacaacaccacgatcgtagatggcaaaggccatagcgatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        956 ttagcgaagaattgggcttgagtctagaaaacgctgaagtggagtttttaggcaaagctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       910 TTACAGAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCTG 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       716 ttttaacggataaaaaaatctctagcatgaaagacattctcccgctactagaaaaaacca 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      670 TAATCACGGATAAAAAAGTGTCAAACATCCAAGACATTTTTGCCACTACTTGAGGAAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               656 ccccttattttgtaacgaacgctgagaaaatgaccgctcaattggataatgcttacatcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                610 CTCAATACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAACCCCATTTATCT 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              596 agggcattgaagatgaattggatgtcgtagaaggcatgcaatttgatagaggctacctct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     550 GAGGTATGGAAACAGAACTTGAAGTGGTTGAAGGCATGGAATTTGACCGTGGTTACCTGT 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       536 tcatcgctgacgctatggaaaaagtgggtaaagacggcgtgatcaccgttgaggaagcta 595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 490 ATATCTCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGTGATTACCATCGAAGAATCTC 549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    476 aagaagaaatcacccaagtggcgaccatttctgcaaactccgatcacaatatcgggaaac 535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373
9c9gtgtggtcgtgaatgaagtagaaaacacgaagggcattttggttttaacgctagca
                                                                                       tcatcatgcgcgccattaaagccccattagctcaaatcgctatcaacgctggttatgatg 1432
                                                                                                                                                                                                                                                                                                                                                                                                                          TAGGAGCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAA 1209
                                                                                                                                                                                   gcgcggctcaaaaagt---gcatttgaatttgcacgatgatgaaaaagtgggctatgaaa 1372
                                                                                                                                                                                                                                                                                                            ATGCTACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGTAGGAACAGCACTTATTA 1269
                                                                                                                                                                                                                                                                                                                                                                            tgggcgctgcgagtgaagtggaaatgaaagagaaaaaagaccgggtggatgacgcgttga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      acaaagaaaaattgcaagaaagattggctaaactctctggcggtgtggctgtgattaaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCGTGAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGTAGCTGTTATCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTAAGATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGGTGATCGTCGTAAAGCTATGCTTGAAGACATTGCTATCTTGACAGGTGGTACAGTGA 909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCTTGTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ttggggacagaagaaaagaaatgctcaaagacatcgctattttaaccggcggtcaagtca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ctctagtggtgaataaattaagaggcgtgttgaatatcgcagcggttaaagctccaggct 895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tgaaagagggcaaaccgcttttaatcatcgctgaagacattgagggcgaagctttaacga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTAAAACCAACCGTCCATTACTCATTATTGCAGATGATGTGGATGGTGAAGCACTTCCAA 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGAAGCTATTGCTCAGGTCGCTGCAGTATCATCACGCTC---TGAAAAAGTTTGGAGAGT 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ataaagctgctgaagcgatcattaatgagcttaaaaaagcgagcaaaaaagtaggcggta 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCA 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aagaaggtttgaggaatatcacggctggggctaaccctattgaagtgaaacgaggcatgg
                                                                                                                                                                                                                                                                                                                                                                                 1255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        729
```

음 경

밁 δõ 밁 Š 밁 Ş 밁 Š 밁 δÃ 밁 Ş 밁 Ş 밁 Ş 밁 Š 밁 Ş 밁 S 밁 δ В S 밁 δÃ 밁 Ş 밁 δÃ 밁 õ 밁

```
밁
                                         Ş
                                                                                  밁
                                                                                                                   Ş
                                                                                                                                                                                        8
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                              Ş
                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LENGTH: 1838
; TYPE: DNA
; ORGANISM: Helicobacter pylori
US-08-456-662-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 5
US-08-466-662-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Covacci, Antonello
APPLICANT: Bugnoli, Massimo
APPLICANT: Bugnoli, Massimo
APPLICANT: Telford; John
APPLICANT: Macchia, Glovanni
APPLICANT: Rappuoli, Rino
TITLE OF INVENTION: Dispnostics
TITLE OF INVENTION: Dispnostics
FILE REFERENCE: CHIR0057
CURRENT APPLICATION NUMBER: US/08/466,662B
CURRENT FILING DATE: 1995-06-06
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 7
TENORU: 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 7, Application US/08466662B Patent No. 6130059 GENERAL INFORMATION:
416 ataaagctgctgaagcgatcattaatgagcttaaaaaagcgagcaaaaaagtaggcggta
                                   373 AAACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCA 432
                                                                                                                                                                                                                                         193 AATTAGAAGATCATTTTGAAAACATGGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAA
                                                                                                                                                          296
                                                                                                                                                                                                                               236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1670 gtatgggaggcatgggcgg 1688
                                                                                                                                                                                            253
                                                                                                                                                                                                                                                                                      176 aaaaaagctatggcgctccaagcatcaccaaagacggcgtgagcgtggctaaagagattg
                                                                                                                                                                                                                                                                                                                                                                          116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1630 TGATGGGTGGGATGGGCGG 1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1611 -gcatgaaatcaaagaagaaaaagcgactccggcaatgcctgatatgggtggcatgggcg 1669
                                                                                                                                                                                                                                                                                                                                         133
                                                                                                                                                                                                                                                                                                                                                                                  73 ATATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTG 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1450 CAGGTGAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGAT 1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1510 CAGCGCTTCAAAATGCAGCTTCTGTAGCTAGTCTTATTTTGACAACAGAAGCAGTTGTTG 1569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1493 atggcaagtatgtggatatgtttaaagaaggcattattgaccccttaaaagtagaaagga 1552
                                                                                                                                                                                                                                                                                                                                                                                                                               56 aaatggcaaaagaaatcaaattittcagatagtgcgagaaaccttttatttgaaggcgtga 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13 ATATGGCAAAAGAAATCAAATTTTCAGCAGATGCGCGTGCTGCCATGGTGCGCGGAGTTG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               / MATCH 31.8%; Score 528.6; DB 3; Local Similarity 58.9%; Pred. No. 1.7e-146; ses 966; Conservative 0: Minmatch.
                                                                      aagaaggtttgaggaatatcacggctggggctaaccctattgaagtgaaacgaggcatgg
                                                                                              ATGAAGGACTAAAAAATGTGACAGGAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTG
                                                                                                                                             cogctgatgctgcoggcgatggcacgaccatgggaccgtgctagcgttatagcattttta
                                                                                                                                                                    CCAATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAGCCATTGTTC
                                                                                                                                                                                                                 aattaagttgcccagtagctaacatgggcgctcaactcgttaaagaagtagcgagcaaaa
                                                                                                                                                                                                                                                                                                             AAAAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCG
                                                                                                                                                                                                                                                                                                                                                              ggcaactccatgacgctgtcaaagtaaccatggggccaagaggcaggaatgtattgatcc 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tcgctctacaaaatgcggtttcggtttcaagcctgcttttaaccacagaagccaccgt--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches 664; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
   475
                                                                          415
                                                                                                           372
                                                                                                                                                 355
                                                                                                                                                                                  312
                                                                                                                                                                                                                     295
                                                                                                                                                                                                                                                        252
                                                                                                                                                                                                                                                                                          235
                                                                                                                                                                                                                                                                                                                               192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           w
••
```

```
1433
                                                                                                                               1390
       1493 atggcaagtatgtggatatgtttaaagaaggcattattgaccccttaaaagtagaaagga 1552
                           1450 CAGGTGAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGAT 1509
                                                                                                                                                                       1330 TTGTGCTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTTGGGTACGAAG 1389
                                                                                                                                                                                                                                           1316
                                                                                                                                                                                                                                                                                                                                                                                       1196
                                                                                                                                                                                                                                                                                                                                                                                                                           1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1090 ACCGTGAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGGTATGTTATCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1076 atgttaaagacagagtcgcgcagatcaaaacccaaattgcaagtacgacaagcgattatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1030 CTATTGCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACTTCTGACTTTG :1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1016 gaaggattgtgattgacaaagacaacaccacgatcgtagatggcaaaggccatagcgatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               716 ttttaacggataaaaaatctctagcatgaaagacattctcccgctactagaaaaaacca 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     670 TAATCACGGATAAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACTTGAGGAAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   536 tcatcgctgacgctatggaaaaagtgggtaaagacggcgtgatcaccgttgaggaagcta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
                                                                             gcggtgtggtcgtgaatgaagtagaaaaacacgaagggcattttggttttaacgctagca
                                                                                                               GCTCCGTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAA 1449
                                                                                                                                                   tcatcatgcgcgccattaaagccccattagctcaaatcgctatcaacgctggttatgatg 1432
                                                                                                                                                                                                                         gcgcggctcaaaaagt----gcatttgaatttgcacgatgatgaaaaagtgggctatgaaa
                                                                                                                                                                                                                                                   CGGTTATTGAAAAAGCTAGCAGCTCTTGAGGTTGATGGCTACTGGGACGTAACA 1329
                                                                                                                                                                                                                                                                                               gcgcgactaaagcggcggttgaagaaggcattgtgattggtggcggttgcggctctcattc 1315
                                                                                                                                                                                                                                                                                                                                                                       tgggcgctgcgagtgaagtggaaatgaaagagaaaaaaagaccgggtggatgacgcgttga
                                                                                                                                                                                                                                                                                                                                                                                                                                             acaaagaaaaattgcaagaaagattggctaaactctctggcggtgtggctgtgattaaag
                                                                                                                                                                                                                                                                                                                     ATGCTACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCACTTATTA 1269
                                                                                                                                                                                                                                                                                                                                                                                                       TAGGAGCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAA 1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTAAGATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ttagcgaagaattgggcttgagtctagaaaacgctgaagtggagtttttaggcaaagctg 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCTTGTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTAAAACCAACCGTCCATTACTCATTATTGCAGATGATGTGGGATGGTGAAGCACTTCCAA 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTACAGAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctctagtggtgaataaattaagaggcgtgttgaatatcgcagcggttaaagctccaggct 895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCAATACATGGTCACAGACAATGAAAAAATGGTTGGAGACCTTGAAAACCCATTTATCT 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tgaaagagggcaaaccgcttttaatcatcgctgaagacattgagggcgaagctttaacga 835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccccttattttgtaacgaacgctgagaaaatgaccgctcaattggataatgcttacatcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATCTCAGAAGCTATGGACCGTGTGGGCAACGATGGTGTGATTACCATCGAAGAATCTC 549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGAAGCTATTGCTCAGGTCGCTGCAGTATCATCACGCTC---TGAAAAAGTTGGAGAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aagaagaaatcacccaagtggcgaccatttctgcaaactccgatcacaatatcgggaaac
                                                                                 1492
                                                                                                                                                                                                                             1372
                                                                                                                                                                                                                                                                                                                                                                           1255
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
Query Match 29
Best Local Similarity 58.
Matches 953; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δõ
```

Ş 밁

밁 δõ 밁 Ş 밁 S 밁 õ 8 S 밁 Ş 밁 ð 밁 Ş 밁 S

õ 밁 Ş

밁

29.98;

0,

Score 496.6; DB Pred. No. 5.6e-1 0; Mismatches 6

674; DB 3 2; 137;

Indels Length

12;

Gaps

4

Ş

밁 Š 밁 Ş 밁 Ş 밁 Š 밁 á

₽

```
); MOLECULE TYPE:
US-08-467-822-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 6
US-08-467-822-28
                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/467,822
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/447,177
FILING DATE: 19-MAY-1995
CLASSIFICATION NUMBER: US 08/432,697
APPLICATION NUMBER: US 08/432,697
FILING DATE: 02-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US 08/432,697
FILING DATE: 02-MAY-1995
CLASSIFICATION: 435
                                                                                                                               TELEFAX: (202) 408-44
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                 NAME: Meyers, Kenneth J. REGISTRATION NUMBER: 25,146 REFERENCE/DOCKET NUMBER: 034 TELECOMMUNICATION INFORMATION: TELEPHONE: (202) 408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FORDPACIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 2284 base pair
                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Sauerbaum, Sebastien
APPLICANT: Ferrero, Richard L.
APPLICANT: Thiberge, Jean-Michel
TITLE OF INVENTION: IMMUNOGENIC COMPOSITIONS AGAINST
TITLE OF INVENTION: COMPOSITIONS, POLYPEPTIDES FOR
TITLE OF INVENTION: COMPOSITIONS, AND NUCLEIC ACID SEQUENCES
TITLE OF INVENTION: POLYPEPTIDES
TITLE OF INVENTION: POLYPEPTIDES
TUBBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1670 gtatgggaggcatgggcgg 1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1611 -gcatgaaatcaaagaagaaaagcgactccggcaatgcctgatatgggtggcatgggcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1570 CTAATAAACCTGAACCAGCTACGCCAGCGCCAGCAATGCCAGCAGGTATGGATCCAGGAA 1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 1300 I S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 20005-3315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Finneg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGATGGGTGGGATGGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28,
                                                                 nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5843460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               D.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/08467822
                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Labigne, Agnes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Finnegan, Henderson,
            DNA (genomic)
                                                     double
                                                                                                                                                408-4400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Street, N.W.
                                                                                                                               28:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1648
                                                                                                                                                                                                         03495.0137-02000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Farabow, Garrett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R USE IN THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SAID
```

```
1404
            1090
                                                       1521
                                                                                                                                                                                                                                                                                                                   1344 TTGGGGACAGGAGAAAAGAAATGCTCAAAGACATCGCTGTTTTAACCGGCGGTCAAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1044
                                                                                                                                                                                                                                                                                                                                                                                                                1284 CTCTAGTGGTGAATAAATTAAGAGGCGTGTTGAATATCGCAGCGGTTAAAGCTCCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1164 TTTTAACGGATAAAAAATCTCTAGCATGAAAGACATTCTCCCGCTACTAGAAAAAACCA 1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1104 CCCCTTACTTTGTAACCAACGCTGAGAAAATGACCGCTCAATTGGATAACGCTTACATCC
                                                                                                                                                                                                                                                          910 TTACAGAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTTGGACAGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             610
                                                                                                                                                                                                                                                                                                                                                    850 TTGGTGATCGTCGTAAAGCTATGCTTGAAGACATTGCTATCTTGACAGGTGGTACAGTGA 909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   730 TTAAAACCAACCGTCCATTACTACTACTGCAGATGATGGTGGATGGTGAAGCACTTCCAA 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             670 TAATCACGGATAAAAAGTGTCAAACATCCCAAGACATTTTGCCACTACTTGAGGAAGTTC 729
                                                                                                                                                                                                                                                                                                                                                                                                                                           790 CCCTTGTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGAT 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          984 TCATCGCTGACGCTATGGAAAAAGTGGGTAAAGACGGCGTGATCACCGTTGAAGAAGCTA 1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         564 GACAACTCCATGACGCTGTCAAAGTAACCATGGGGCCAAGAGGCAAGGAACGTGTTGATCC 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13
                                                                        CTATTGCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACAACTTCTGACTTTG
ACCGTGAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGTAGCTGTTATCAAAG
                                             ACGTCAAAGACAGAGTCGCGCAAATCAAAACCCAAATTGCAAGCACGACAAGCGATTACG
                                                                                                                                  CGAAGATTGTGATTGACAAGACAACACCACGATCGTAGATGGCAAAGGCCATAGCCATG
                                                                                                                                                                CTAAGATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAG
                                                                                                                                                                                                                            TTAGCGAAGAATTGGGCTTGAGTCTAGAAAACGCTGAAGTG---GAGTTTTTAGGCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAAGAGGGCAAACCGCTTTTAATCATCGCTGAAGACATTGAGGGCGAAGCTTTAACGA 1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGGCATTGAAGATGAATTAGATGTCGTAGAAGGCATGCAATTTGATAGAGGCTACCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCAATACATGGTCACAGACAATGAAAAATGGTTGCAGACCTTGAAAACCCATTTATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGGTATGGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGT 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGAAGCTATTGCTCAGGTCGCTGCAGTATCATCACGCTC---TGAAAAAGTTGGAGAGT 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATTAGAAGATCATTTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAA 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAAAGCTATGGCGCTCCAAGCATCACCAAAGACGGCGTGAGCGTGGCTAAAGAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGTGTTATTACCATCGAAGAATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATAAAGCGCCTGAAGCGATCATTAATGAGCTTAAAAAAAGCGAGCAAAAAAGTGGGCGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCA 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGAAGGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCTGATGCCGCCGGCGATGGCACGGACCACGGCGTGCTGGCTTATAGCATTTTTA 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGAAGAAATCACCCAAGTAGCGACCATTTCTGCAAACTCCGGATCACAATATCGGGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGAGGGCTTGAGGAATATCACGGCTGGGGCTAACCCTATTGAAGTGAAACGAGGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAGCCATTGTTC 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTAAGTTGCCCCGTGGCTAACATGGGCGCTCAGCTCGTTAAAGAAGATGCGAGCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAATGGCAAAAGAAATCAAATTTTCAGATAGCGCAAGAAACCTTTTATTTGAAGGCGTAA 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCG 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATGTTAGCAGATACCGTCAAAGGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTG 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATGGCAAAAGAAATCAAATTTTCAGCAGATGCGCGTGCCGTGCCATGGTGCGCGGAGTTG
1149
                                                                                       1089
                                                                                                                                                                                                                                                                           969
                                                                                                                                                                                                                                                                                                                        1403
                                                                                                                                                                                                                                                                                                                                                                                                                1343
                                             1580
                                                                                                                                       1520
                                                                                                                                                                                 1029
                                                                                                                                                                                                                              1460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72
```

55 P O5 P O5 P

B 8

S

5 5 5 5 B

B 5

8 8

04 p

밁

```
US-08-432-697-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 28, Application US/08432697 Patent No. 6248330 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Meyers, Kenneth J.
                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan,
ADDRESSEE: Dunner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1938 ATGGCAAGTATGTGGACATGTTTAAAGAAGGCATTATTGACCCCTTAAAAGTAGAAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1330 TIGTGCTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAG 1389
                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2115 GAATGGGAGGCATGGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1450 CAGGTGAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGAT 1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1818 TCATCATGCGCGCCATTAAAGCCCCATTAGCTCAAATCGCTATCAATGCCGGTTATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1701 GCGCGACTAAAGCGGGGTTGAAGAAGGCATTGTGATTGGGGGCGGTGCGGCCCTCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1150 TAGGAGCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAA 1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1581 ACAAAGAAAATTGCAAGAAAGATTGGCCAAACTCTCTGGCGGTGTGGCTGTGATTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1270 CGGTTATTGAAAAAGTAGCAGCTCTTGAGCTTGAGGGCGATGATGCTACTGGACGTAACA 1329
                                                                                                                                                                                                                                   STREET: 1300 I S. CITY: Washington STATE: D.C.
                                                APPLICATION NUMBER: US/O FILING DATE: 02-MAY-1995
                                                                                                                                                                                                     ZIP: 20005-3315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGATGGGTGGGATGGGCGG 1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTAATAAACCTGAACCAGCTACGCCAGCGAGCAGTATGCCAGGTATGGATCCAGGAA 1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTCCGTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAA 1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCGCTTTACAAAATGCGGTTTCGGTTTCAAGCCTGCTTTTAACCACAGAAGCCACCGT--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCGCTTCAAAATGCAGCTTCTGTAGCTAGTCTTATTTTGAÇAAACAGAAGCAGTTGTTG 1569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -GCATGAAATCAAAGAAGAAAAAGCGGCCCCAGCAATGCCTGATATGGGTGGCATGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGGTGTGGTCGTGAATGAAGTAGAAAAACACGAAGGGCATTTTGGTTTTAACGCTAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCGCGGCCCAAAAAGT----GCATTTGAATTTACACGATGATGAAAAAGTGGGCTATGAAA 1817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGCTACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCACTTATTA 1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lablum,
Sebastre.
Sauerbann, Sebastre.
Ferrero, Richard L.
Ferrero, Richard L.
Thiberge, Jean-Michel
INVENTION: IMMINGERIC COMPOSITIONS AGAINST
INVENTION: HELICOBACTER INFECTION, POLYPEPTIDES FOR USE IN THI
INVENTION: COMPOSITIONS, AND NUCLEIC ACID SEQUENCES ENCODING
""FENTION: POLYPEPTIDES"
                                                                                                                                                                                                                                                                           1300 I Street,
                                                                      US/08/432,697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2133
                                                                                                                                                                                                                                                                             N.W.
                                                                                                          Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1640
                                                                                                                                                                                                                                                                                                                                                                                    NG SAID
```

```
LENGTH: 2284 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-432-697-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                    1164
                                                                                                                                                          1104
                                                                                                                                                                                                        1044 AGGGCATTGAAGATGAATTAGATGTCGTAGAAGGCATGCAATTTGATAGAGGCTACCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (202) 408-4400
NFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
LENGTH: 2284 base pairs
                                              1224
                   790
                                                                        730
                                                                                                                             670
                                                                                                                                                                                    610
                                                                                                                                                                                                                                          550
                                                                                                                                                                                                                                                                    984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 03
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 408-4000
                                                                                                                                                                                                                                                                                                490
                                                                                                                                                                                                                                                                                                                           924
                                                                                                                                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                                                 864
                                                                                                                                                                                                                                                                                                                                                                                                             373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133 AAAAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                        804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    624 AAAAAAGCTATGGCGCTCCAAGCATCACCAAAGACGGCGTGAGCGTGGCTAAAGAGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         564 GACAACTCCATGACGCTGTCAAAGTAACCATGGGGCCAAGAGGCAGGAACGTGTTGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              504 AAATGGCAAAAGAAATCAAATTTTCAGATAGCGCAAGAAACCTTTTATTTGAAGGCGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73. ATATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTG 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13 ATATGGCAAAAGAAATCAAATTTTCAGCAGATGGGGGGTGCTGCCATGGTGGGGGGAGTTG
CCCTTGTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGAT
                                     TGAAAGAGGGCAAACCGCTTTTAATCATCGCTGAAGACATTGAGGGCGAAGCTTTAACGA
                                                                                            TTTTAACGGATAAAAAATCTCTAGCATGAAAGACATTCTCCCGCTACTAGAAAAAACCA
                                                                                                             TAATCACGGATAAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACTTGAGGAAGTTC
                                                                                                                                                   CCCCTTACTTTGTAACCAACGCTGAGAAAATGACCGCTCAATTGGATAACGCTTACATCC
                                                                                                                                                                      CTCAATACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAACCCCATTTATCT
                                                                                                                                                                                                                       GAGGTATGGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGT
                                                                                                                                                                                                                                                                                ATATCTCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGTGATTACCATCGAAGAATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATTAAGTTGCCCCGTGGCTAACATGGGCGCTCAGCTCGTTAAAGAAGATGCGAGCAAAA
                                                                 TTAAAACCAACCGTCCATTACTCATTATTGCAGATGATGTGGATGGTGAAGCACTTCCAA
                                                                                                                                                                                                                                                             TCATCGCTGACGCTATGGAAAAAGTGGGTAAAGACGGCGTGATCACCGTTGAAGAAGCTA: 1043
                                                                                                                                                                                                                                                                                                                     AAGAAGAATCACCCAAGTAGCGACCATTTCTGCAAACTCCGATCACAATATCGGGAAAC
                                                                                                                                                                                                                                                                                                                                             AGGAAGCTATTGCTCAGGTCGCTGCAGTATCATCACGCTC---TGAAAAAGTTGGAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCGCTGATGCCGCCGGCGATGGCACGACCACAGCGACCGTGCTGGCTTATAGCATTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAGCCATTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATTAGAAGATCATTTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAA
                                                                                                                                                                                                                                                                                                                                                                           ATAAAGCGCCTGAAGCGATCATTAATGAGCTTAAAAAAGCGAGCAAAAAAGTGGGCGGTA
                                                                                                                                                                                                                                                                                                                                                                                                     AAACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGAGGGCTTGAGGAATATCACGGCTGGGGCTAACCCTATTGAAGTGAAACGAGGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGAAGGACTAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 58.1
53; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03495.0137-00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 496.6;
Pred. No. 5.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches 674;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .6e-137;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2284;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
             849
                                        1283
                                                                                             1223
                                                                                                                                                                              669
                                                                                                                                                                                                         1103
                                                                                                                         729
                                                                                                                                                                                                                                    609
                                                                                                                                                                                                                                                                                           549
                                                                                                                                                                                                                                                                                                                                                489
                                                                                                                                                                                                                                                                                                                                                                           923
                                                                                                                                                                                                                                                                                                                                                                                                       432
                                                                                                                                                                                                                                                                                                                                                                                                                                  863
                                                                                                                                                                                                                                                                                                                                                                                                                                                             372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4
                                                                                                                                                            RESULT 8
US-08-466-248-28
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                Sequence 28
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                            2056
                                                                                                                                                                                                                                                                                                                                 1998
                                                                                                                                                                                                                                                                                                                                                            1510
                                                                                                                                                                                                                                                                                                                                                                                       1938
                                                                                                                                                                                                                                                                                                                                                                                                                   1450
                                                                                                                                                                                                                                                                                                                                                                                                                                             1878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17.01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1404
                                                                                                                                                28,
```

S 밁 õ 밁 Š ₽ Ş 밁 ş

Ş 밁

문 õ 밁 Š 밁 Ş 밁 Ş 밁 Ş 밁 õ 용 Ş 밁 Ş

```
GENERAL INFORMATION:
APPLICANT: Labigne, Agnes
APPLICANT: Sauerbaum, Sebastien
APPLICANT: Ferrero, Richard L.
APPLICANT: Thiberge, Jean-Michel
TITLE OF INVENTION: IMMUNOGENIC COMPOSITIONS AGAINST
TITLE OF INVENTION: HELICOBACTER INFECTION, POLYPEPTI
TITLE OF INVENTION: COMPOSITIONS, AND NUCLEIC ACID SE
TITLE OF INVENTION: POLYPEPTIDES
NUMBER OF SEQUENCES: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                               2115 GAATGGGAGGCATGGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1210 ATGCTACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCACTTATTA 1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1150 TAGGAGCTCCAACAGAGACAGCTTTAAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1521 ACGTCAAAGACAGAGTCGCGCAAATCAAAACCCAAATTGCAAGCACGACAAGCGATTACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1344 TTGGGGACAGGAGAAAAGAAATGCTCAAAGACATCGCTGTTTTAACCGGCGGTCAAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1284 CTCTAGTGGTGAATAAATTAAGAGGCGTGTTGAATATCGCAGCGGTTAAAAGCTCCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGATGGGTGGGATGGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAATAAACCTGAACCAGCTACGCCAGCGCCAGCAATGCCAGCAGGTATGGATCCAGGAA 1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCGCTTTACAAAATGCGGTTTCGGTTTCAAGCCTGCTTTTAACCACAGAAGCCACCGT--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCGCTTCAAAATGCAGCTTCTGTAGCTAGTCTTATTTTGACAACAGAAGCAGTTGTTG 1569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGGTGAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGAT 1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGTGCTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGGCGCTGCGAGTGAAGTGGAAATGAAAGAGAAAAAAAGACCGGGTGGATGACGCGTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCAAGTATGTGGACATGTTTAAAGAAGGCATTATTGACCCCTTAAAAGTAGAAAGGA 199;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGGTGTGGTCGTGAATGAAGTAGAAAAACACGAAGGGCATTTTGGTTTTAACGCTAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTCCGTAGTTATTGACAAGTTGAAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAA 1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCATCATGCGCGCCATTAAAGCCCCCATTAGCTCAAATCGCTATCAATGCCGGTTATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCGCGGCCCAAAAAGT---GCATTTGAATTTACACGATGATGAAAAAGTGGGCTATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGTTATTGAAAAAGTAGCAGCTCTTGAGCTTGAGGGCGATGATGCTACTGGACGTAACA 1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -GCATGAAATCAAAGAAGAAAAAGCGGCCCCAGCAATGCCTGATATGGGTGGCATGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCGCGACTAAAGCGGCGGTTGAAGAAGGCATTGTGATTGGGGGGCGGGGGGGCGCTCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCGTGAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGTTAGCTGTTATCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTATTGCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACATCTGACTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTAAGATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTACAGAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGGIGATCGICGIAAAGCIATGCIIGAAGACAIIGCIATCIIGACAGGIGGIACAGIGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAAAGAAAATTGCAAGAAAGATTGGCCAAACTCTCTGGCGGTGTGGCTGTGATTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGAAGATTGTGATTGACAAAGACAACACCACGATCGTAGATGGCAAAGGCCATAGCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTAGCGAAGAATTGGGCTTGAGTCTAGAAAACGCTGAAGTG---GAGTTTTTAGGCAAAG
                                                                                                                                                                                                                                                                                        3, Application US/08466248
6258359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1648
                                                           POLYPEPTIDES
IC ACID SEQUEN
                                                           SEQUENCES
                                                        USE IN THE ENCODING SAID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         909
```

```
NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE_DOCKET NUMBER: 0349:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 408-4400
ITELEFAX: (202) 408-4400
INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
LENGTH: 2284 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-466-248-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 29.9%; Score 496.6; DB 4; Length 2284; Best Local Similarity 58.1%; Pred. No. 5.6e-137; Matches 953; Conservative 0; Mismatches 674; Indels 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/447,177
FILING DATE: 19-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
ZIP: 20005-3315
ZOUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
         864
                                                                                                                                                                  313 ATGAAGGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTG 372
                                                                                                                                                                                                                           744 CCGCTGATGCCGCCGATGGCACGACCACCACCGTGCTGGCTTATAGCATTTTTA 803
                                                                                                                                                                                                                                                                                  253 CCAATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAGCCATTGTTC 312
                                                                                                                                                                                                                                                                                                                                           684 AATTAAGTTGCCCCGTGGCTAACATGGGCGCTCAGCTCGTTAAAGAAGATGCGAGCAAAA 743
                                                                                                                                                                                                                                                                                                                                                                                                 193 AATTAGAAGATCATTTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAA 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                              564 GACAACTCCATGACGCTGTCAAAGTAACCATGGGGCCAAGAGGCAGGAACGTGTTGATCC 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             504 AAATGGCAAAAGAAATCAAATTTTCAGATAGCGCAAGAAACCTTTTATTTGAAGGCGTAA 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
ADDRESSEE: Dunner
STREET: 1300 I Street, N.W.
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              133 AAAAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCG 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 ATATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCGAATGTTGTTCTTG 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13 ATATGCCAAAAGAAATCAAATTTTCAGCAGATGCGCGTGCTGCCATGGTGCGCGGAGTTG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/01
FILING DATE: 06-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 
FILING DATE: 02-MA
                                               ARACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCA 432
ATAAAGCGCCTGAAGCGATCATTAATGAGCTTAAAAAAAGCGAGCAAAAAAAGTGGGCGGTA
                                                                                                            AAGAGGGCTTGAGGAATATCACGGCTGGGGGCTAACCCTATTGAAGTGAAACGAGGCATGG 863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              UMBER: US 08/432,697
02-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03495.0137-02000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
   923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4,
                   1938 ATGGCAAGTATGTGGACATGTTTAAAGAAGGCATTATTGACCCCTTAAAAGTAGAAAGGA 1997
```

Ωy	433	GGTCGCTGCAGTATCATCACGCTCTGAAAAAGTTGGAGAGT 48	9
망	.924	AAGAAGAANTCACCCAAGTAGCGACCATTTCTGCAAACTCCGATCACAATATCGGGAAAC 98	ω
Qy	490	OTC 54	9
В	984	GGTAAAGACGGCGTGATCACCGTT	43
Qy	550	ATGGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGT 60	9
, D	1044	AGGCATTGAAGATGATTAGATGTCGTAGAAGGCATGCAATTTGATAGAGGCTACCTCT 110	23
Qy	610	TCAATACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAACCCATTTATCT 66	9
ф	1104	CCCCTTACTTTGTAACCAACGCTGAGAAAATGACCGCTCAATTGGATAACGCTTACATCC 11	63
δ	670	AATCACGGATAAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACTTGAGGAAGTTC 72	9
В	1164	TTTTAACGGATAAAAAATCTCTAGCATGAAAGACATTCTCCCGGTACTAGAAAAAACCA 12	23
Qy	730	TAAAACCAACCGTCCATTACTCATTATTGCAGATGATGTGGGATGGTGAAGCACTTCCAA 78	9
망	1224	TGAAAGAGGGCAAACCGCTTTTAATCATCGCTGAAGACATTGAGGGCGAAGCTTTAACGA 12	83
Ωy	790	CCTTGTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGAT 84	9
당	1284	CTCTAGTGGTGAATAAATTAAGAGGCGTGTTGAATATCGCAGCGGTTAAAGCTCCAGGCT 13	43
Qy	. 850	. 90	ø
В	1344	TGGGGACAGGAGAAATGCTCAAAGACATCGCTGTTTTAACCGGCG	3
Qy	910	AAGATGCTACAATGACAGCCCTTGGACAGGCTG 96	9
В	1404	TAGCGAA	0
Qy	970	CAGTAATTGTTGAAGGTTCAGC	9
В	1461	GAAGATTGTGATTGACAAAGACAACACCACGATCGTAGATGGCAAAGGCCATAGCCATG 15	20
Qy	1030	AACA	9
ф	1521	ACGTCADAGACAGAGTCGCGCADAATCADADACCCADATTGCADAGCACGACAAGCGATTDCG 158	õ
Qy	1090	TATO	9
망	1581	CAAA	0
Ϋ́	1150	AGGAGCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAG	9
용	1641	17	00
Qγ	1210	ATGCTACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCACCTTATTA 126	9
50	10/1	GUGUGACTAAAGUGGUGGTTGAAGAAGGCAFTGTGATTGGGGGCGGTGCGGCCCTCATTC 176	ŏ
Qy	1270	TTGAGGGCGATGATGCTACTGG	ě
ઠ	1761	GCGCGGCCCAAAAAGTGCATTTGAATTTACACGATGAAAAAGTGGGCTATGAAA 181	7
Qγ	1330	CGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTA	9
문	1818	AAGCCCCATTAGCTCAAATCGCTATCAATGC	7
Qy	1390	➣	؈
В	1878	GCGGTGTGGTCGTGAATGAAGTAGAAAAACACGAAGGGCATTTTGGTTTTAACGCTAGCA 193	7
QΥ	1450	GGTGAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAAC	ø
문	1938	ACATGTTTAAAGAAGGCATTATTGACCCCTTAAAAGT	7

```
Ş
                                                       밁
                                                                                                                                  В
                                                                                            Ş
                                                                                                                                                                       δ
                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                              Db 530108 gccctcgccgatgcggtaaaggtgacattgggccccaagggccgcaacgtcgtcctggaa 530167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db 530048 atggccaagacaattgcgtacgacgaagaggcccgtcgcggcctcgagcggggcttgaac 530107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-103-840A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               믕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-103-840A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 875; Conserv
                                                                                                                                                                                                                                                                               530228 ctggaggatccgtacgagaagatcggcgccgagctggtcaaagaggtagccaagaagacc 530287
                                   530408 aaggccgtggagaaggtcaccgagaccctgctcaagggcgccaaggaggtcgagaccaag 53046
                                                                                                                                                                                                530288 gatgacgtcgccggtgacggcaccacgacggccaccgtgctggcccaggcgttggttcgc 530347
                                                                                                                                                                                                                                                                                                                                                                                530168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/09103840A Patent No. 6294328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: FLEISCHMAN, Robert D.
APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: DAM SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION UNMEER: US/09/103,840A
UNMEER OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: CDC 1551
OTHER INFORMATION: "n" bases at various positions throughout the sequence
OTHER INFORMATION: represent a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Mycobacterium tuberculosis FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                          255 AATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAGCCATTGTTCAT 314
435 GAAGCTATTGCTCAGGTCGCTGCAGTATCATCACGCTCTGAAAAAGTTGGAGAGTATATC 494
                                                                             375 ACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCAAG 434
                                                                                                                                             315 GAAGGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTGAA 374
                                                                                                                                                                                                                                                                                                                         195 TTAGAAGATCATTTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                      135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENGTH: 4403765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1630 TGATGGGTGGGATGGGCGG 1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2115 GAATGGGAGGCATGGGCGG 2133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15 ATGGCAAAAGAAATTTTCAGCAGATGCGGGTGCTGCCATGGTGCGCGGAGTTGAT 74
                                                                                                                    gagggcctgcgcaacgtcgcggccggcgccaacccgctcggtctcaaacgcggcatcgaa 53040;
                                                                                                                                                                                                                                                                                                                                                                 aagaagtggggtgcccccacgatcaccaacgatggtgtgtccatcgccaaggagatcgag
                                                                                                                                                                                                                                                                                                                                                                                           AAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCGAA 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTGAA 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -GCATGAAATCAAAGAAGAAAAAGCGGCCCCAGCAATGCCTGATATGGGTGGCATGGGCG 2114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTAATAAACCTGAACCAGCTACGCCAGCGCCAGCAGCAGTGCAGGTATGGATCCAGGAA 1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27.6%;
55.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 458.6; DB 4;
Pred. No. 6.4e-124;
0; Mismatches 694;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 4403765;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                             254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
```

```
Ş
                                                                                   밁
                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                    γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                Db 531248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Db 530888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                        531428 gtggtggccgagaaggtgcgcaacctgccggctggccacggactgaacgctcagaccggt 53148:
                                                                                                                                                                                                                                                531368 aaggtggcgctggaggccccgctgaagcagatcgccttcaactccgggctggagccgggc 53142:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             531128 gagaagctgcaggagcggctggccaagctggccggtggtgtcgcggtgatcaaggccggt 53118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       531188 gccgccaccgaggtcgaactcaaggagcgcaagcaccgcatcgaggatgcggttcgcaat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               531008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           530768 gccggtaagccgctgctgatcatcgccgaggacgtcgagggcgaggcgctgtccaccctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 530708 gtcagctccaaggtgtccactgtcaaggatctgctgccgctgctcgagaaggtcatcgga 53076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         530648 tacttcgtgaccgacccggagcgtcaggaggcggtcctggaggacccctacatcctgctg 53070:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               530588 tttgggctgcagctcgagctcaccgagggtatgcggttcgacaagggctacatctcgggg 530647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      530828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     530468 gagcagattgcggccaccgcagcgatttcggcgggtgaccagtccatcggtgacctgatc
1515 CTTCAAAATGCAGCTTCTGTAGCTAGTCTTATTTTGACAACAGAAGCAGTTGTTGCTAAT 1574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       530528 gccgaggcgatggacaaggtgggcaacgagggcgtcatcaccgtcgaggagtccaacacc 530587
                                                                                                              1455 GAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGATCAGCG 1514
                                                                                                                                                                                                                                                                                                                                                                                                      1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1095 GAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGGTAGCTGTTATCAAAGTAGGA 1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       735 ACCAACCGTCCATTACTCATTATTGCAGATGATGTGGATGGTGAAGCACTTCCAACCCTT 794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   615 TACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAAACCCATTTATCTTAATC 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            555 ATGGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGTCTCAA 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                495 TCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGTGATTACCATCGAAGAATCTCGAGGT 554
                                                                    gtctacgaggatctgctcgctgccggcgttgctgacccggtcaaggtgacccgttcggcg
                                                                                                                                                                                        GTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAACAGGT 1454
                                                                                                                                                                                                                                                                                                                                         gccccgaccctggacgagctgaagctcgaaggcgacgaggcgaccggcccaacatcgtg
                                                                                                                                                                                                                                                                                                                                                                                     ATTGAAAAAGTAGCAGCTCTTGAGCTTGAGGGCGATGATGCTACTGGACGTAACATTGTG 1334
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCACTTATTACGGTT 1274
                                                                                                                                                                                                                                                                                CTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAGGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                 gccaaggccgccgtcgaggagggcatcgtcgccggtgggggtgtgacgctgttgcaagcg 53130:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAAATGCT 1214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gccggacgagtggcccagatccgccaggagatcgagaacagcgactccgactacgaccgt 53112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACTTCTGACTTTGACCGT 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gtcgtggtcaccaaggacgagaccaccatcgtcgagggcgccggtgacaccgacgccatc 531067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gaagaggtcggcctgacgctggagaacgccgacctgtcgctgctaggcaaggcccgcaag 53100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCTGCTAAG 974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gaccgccgcaaggcgatgctgcaggatatggccattctcaccggtggtcaggtgatcagc 530947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATCGTCGTAAAGCTATGCTTGAAGACATTGCTATCTTGACAGGTGGTACAGTGATTACA 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gtcgtcaacaagatccgcggcaccttcaagtcggtggcggtcaaggctcccggcttcggc 530887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGATTTGGT 854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAAGGTTCAGGAAGTTCAGAAGCTATT 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACGGATAAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACTTGAGGAAGTTCTTAAA
                                                                       531547
                                                                                                                                                                                                                                                                                                 1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                530827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     530527
```

밁

```
δã
                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                  Db 528846 gatgacgtcgccggtgacggcaccacgacggccaccgtgctggcccaggcgttggttcgc 528905
                                                                           В
                                                                                                                     δÃ
                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db 528666 gccctcgccgatgcggtaaaggtgacattgggccccaagggccgcaacgtcgtcctggaa 528725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Db 528606 atggccaagacaattgcgtacgacgaagaggcccgtcgcggcctcgagcggggcttgaac 528665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-103-840A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, JOHN C.
APPLICANT: VENTER, JOHN C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 124366-2007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILLIG DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin Ver. 2.1
SEQ ID.
SEQ ID. 111200
                                                                                                                                                                                                                                                528966 aaggccgtggagaaggtcaccgagaccctgctcaagggcgccaaggaggtcgagaccaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         528786 ctggaggatccgtacgagaagatcggcgccgagctggtcaaagaggtagccaagaagacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 55.8 Matches 875; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/09103840A Patent No. 6294328
                                                                 529086 gccgaggcgatggacaaggtgggcaacgagggcgtcatcaccgtcgaggagtccaacacc 529145
                                                                                                                                                                     529026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     531548 ctgcagaatgcggcgtccatcgcggggctgttcctgaccaccgaggccgtcgttgccgac 531607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: FLEISCHMAN, Robert D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 4411529
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1575 AAACCTGAA 1583
555 ATGGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGTCTCAA 614
                                                                                               495 TCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGTGATTACCATCGAAGAATCTCGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                255 AATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAGCCATTGTTCAT 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          195 TTAGAAGATCATTTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         75 ATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTGAA 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAGGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTGAA
                                                                                                                                                             gagcagattgcggccaccgcagcgatttcggcgggtgaccagtccatcggtgacctgatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aagaagtggggtgcccccacgatcaccaacgatggtgtgtccatcgccaaggagatcgag 528785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCGAA 194
                                                                                                                                                                                                          GAAGCTATTGCTCAGGTCGCTGCAGTATCATCACGCTCTGAAAAAGTTGGAGAGTATATC
                                                                                                                                                                                                                                                                                                                                             gagggcctgcgcaacgtcgcggccggccaacccgctcggtctcaaacgcggcatcgaa
                                                                                                                                                                                                                                                                                                  ACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aagccggaa 531616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 458.6; DB 4;
Pred. No. 6.4e-124;
0; Mismatches 694;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 4411529;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 528845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
Db 530106
                                                                                                                                                        Š
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db 529386 gtcgtcaacaagatccgcggcaccttcaagtcggtggcggtcaaggctcccggcttcggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
530166 aagccggaa
                                                                                                                                                                                                   530046 gtctacgaggatctgctcgctgccggcgttgctgacccggtcaaggtgacccgttcggcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        529506 gaagaggtcggcctgacgctggagaacgccgacctgtcgctgctaggcaaggcccgcaag
                                                                                                                                                                                                                                                                                                                                                                                                        529926 aaggtggcgctggaggccccgctgaaqcagatcgccttcaactccgggctggagccgggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           529866 gccccgaccctggacgagctgaagctcgaaggcgacgaggcgaccggccaacatcgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 529806 gccaaggccgccgtcgaggagggcatcgtcgccggtgggggtgtgacgctgttgcaagcg 529865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          529746 gccgccaccgaggtcgaactcaaggagcgcaagcaccgcatcgaggatgcggttcgcaat 529805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             529626 gccggacgagtggcccagatccgccaggagatcgagaacagcgactccgactacgaccgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               529686 gagaagctgcaggagcggctggccaagctggccggtggtgtcgcggtgatcaaggccggt 529745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        529566 gtcgtggtcaccaaggacgagaccaccatcgtcgagggcgccggtgacaccgacgccatc 529625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              529446 gaccgccgcaaggcgatgctgcaggatatggccattctcaccggtggtcaggtgatcagc 529505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        529266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               529206 tacttcgtgaccgacccggagcgtcaggaggcggtccttggaggacccctacatcctgctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     529146 tttgggctgcagctcgagctcaccgagggtatgcggttcgacaagggctacatctcgggg 529205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1215 ACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCACTTATTACGGTT 1274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1155 GCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAAATGCT 1214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1035 GCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACTTCTGACTTTGACCGT 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1095 GAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGGTGTAGCTGTTATCAAAGTAGGA 1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       975 ATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAGCTATT 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       855 GATCGTCGTAAAGCTATGCTTGAAGACATTGCTATCTTGACAGGTGGTACAGTGATTACA 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    915 GAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCTGCTAAG
                                                                                                                                                                                                                                                                                                                                     GTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAACAGGT 1454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTGAAAAAGTAGCAGCTCTTGAGCGTGAGGGCGATGATGCTACTGGACGTAACATTGTG 1334
                                                                                                                                    CTTCAAAATGCAGCTTCTGTAGCTAGTCTTATTTTGACAACAGAAGCAGTTGTTGCTAAT 1574
                                                                                                                                                                                                                                       GAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGATCAGCG 1514
                                                                                                                                                                                                                                                                                                        gtggtggccgagaaggtgcgcaacctgccggctggccacggactgaacgctcagaccggt 530045
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAGGCTCC 1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGATTTGGT 854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gccggtaagccgctgctgatcatcgccgaggacgtcgagggcgaggcgctgtccaccctg 529385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCAACCGTCCATTACTCATTATTGCAGATGATGTGGATGGTGAAGCACTTCCAACCCTT 794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gtcagctccaaggtgtccactgtcaaggatctgctgccgctgctcgagaaggtcatcgga 529325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAACCCCATTTATCTTAATC 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGGATAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACTTGAGGAAGTTCTTAAA
     530174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              974
```

RESULT 11 US-08-997-080-159

```
Ş
                                                                                                                                                              밁
                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 15
SEQUENCE CHARACTERISTICS:
LENGTH: 1626 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 26.9%; Score 446.8; DB 2; Best Local Similarity 54.9%; Pred. No. 2.5e-122; Matches 880; Conservative 0; Mismatches 722;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: WATSON, JAMES D.
APPLICANT: WATSON, PAUL L.J.
TITLE OF INVENTION: METHODS AND COMPOUNDS FOR THE TREATMENT OF IMMUNOLOGICALLY-
NUMBER OF SEQUENCES: 194
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 159, Application US/08997080 Patent No. 5968524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Sleath, Janet
REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 1100
TELECOMOUNICATION INFORMATION:
TELEPHONE: 206-269-0565
                                                                                                                                                                                                                                                                                                                            ~121 AAGAAGTGGGGCGCCCCCACGATCACCAACGATGGTGTCCATCGCCAAGGAGATCGAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOCTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/997,080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
375 ACAGCAACAGCAACAGCTGTTGAAGCCTTGGAAGCCATTGCTCAACCTGTATCTGGCAAG 434
                                                           301 GAAGGCCTGCGCAACGTCGCAGCCGGCGCCAACCCGGCTCGGCCTCAAGCGTGGCATCGAG 360
                                                                                                                                                                                                                                                                                 195 TTAGAAGATCATTTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAACC 254
                                                                                                                                                                                 255 AATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAGCCATTGTTCAT 314
                                                                                                                                                                                                                                        181 CTGGAGGACCCGTACGAGAAGATCGGCGCTGAGCTGGTCAAAGAGGTCGCCAAGAAGACC 240
                                                                                                                                                                                                                                                                                                                                                           135 AAAGCTTTTGGTTCTCCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCGAA 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15 ATGGCAAAAGAAATCAAATTTTCAGCAGATGCGCGTGCTGCCATGGTGCGCGGAGTTGAT 74
                                                                                                                                                                                                                                                                                                                                                                                                                  61 GCCCTCGCAGACGCCGTAAAGGTGACGTTGGGCCCGAAGGGTCGCAACGTCGTGCTGGAG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                          75 ATGITAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTGAA 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 206-269-0563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: LAW Offices of Ann W. Speckman
STREET: 2601 Elliott Avenue, Suite 4185
CITY: Seattle
STATE: WA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 ATGGCCAAGACAATTGCGTATGACGAAGAGGCCCGCGGTGGCCTCGAGCGGGGCCTCAAC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                      GAAGGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTGAA 374
                                                                                                                                                    98121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SS: single
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            159:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11000.1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1626;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0:
```

Oy Db		361 AAGGCTGTCGAGGCTGTCACCCAGTCGCTGCTGAAGTCGGCCAAGGAGGTCGAGACCAAG
מם		421 GAGCAGATTTCTGCCACCGCGGCGATTTCCGCCGGCGACACCCAGATCGGCGAGCTCATC
γo		495 TCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGTGATTACCATCGAAGAATCTCGAGGT
, ,		
do Qy		555 ATGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGTCTCAA 511 TTGGGCCTGCAGCTGAACTTGACCGACGGAGGTAACCTGTCGCT 541 TTGGGCCTGCAGCTGAACTGAACGCTTGACAAAGGCTTAACAGAGGTGACGCT
Qy		615 TACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAAACCCATTTATCTTAATC
ф		601 TACTTCGTGACGCGACGCCGAGGCGCCAGGAAGCCGTCCTGGAGGATCCCTACATCCTGCTG
ĄQ.	675	
рb		661 GTCAGCTCCAAGGTGTCGACCGTCAAGGATCTGCTCCCGCTGCTGGAGAAGGTCATCCAG
, Q		735 ACCAACCGTCCATTACTCCATATTGCAGATGATGTGGATGGTGAAGCACTTCCAACCCTT
δ		
D D	7	
δ	855	S GATCGTCGTAAAGCTATGCTTGAAGACATTGCTATCTTGACAGGTGGTACAGTGATTACA
DB DB	841	
D Qy	915	GAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCCGCTAAG
Qγ	975	
ָ בַ	100	
Qy	1035	5 GCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACATTCTGACCTTTGACCGT
2 8	1005	
Db	1081	1
Qy	1155	
문	1141	
Qy	1215	
Дb	1201	
Qy	1275	
D D	1261	
2. Qy	1335	
뫄	1321	1 CGCGTGGCGCTGTCGGCTCCAGCTCAAGCAGATCGCCTTCAACGGCGGCCTGGAGCCCGGC
y Oy	1395	5 GTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAACAGGT
Qy	1455	
B :	1441	

```
Š
    ₽
                                                            밁
                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-997-362-159; Sequence 159, App. Patent No. 5985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
                                                                                                      Query Match
Best Local Similarity 54.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Tan, Paul
APPLICANT: Hyama, Jun
APPLICANT: Visser, Eliz
APPLICANT: Skinner, Maz
APPLICANT: Scott, Lind
APPLICANT: Scott, Lind
APPLICANT: Prestidge, F
                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: U.S. Patent Application No. 5985287 08/873,970
FILING DATE: June 12, 1997
APPLICATION NUMBER: U.S. Patent Application No. 5985287 08/705,347
APPLICATION NUMBER: U.S. Patent Application No. 5985287 08/705,347
FILING DATE: August 29, 1996
ATTORNEY/AGENT INFORMATION:
NAME: Sleath, Janet
REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 31000.1002c2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-269-0565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOCTWARE: FastsEQ for Windows Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/997,362
                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 1626 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: COMPOUNDS TITLE OF INVENTION: TREATMENT NUMBER OF SEQUENCES: 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1575 AAACCTGAACCAGCTACGCCAGCGCCAGCAATGCCAGCAGGT 1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1501 CTGCAGAACGCGCCGTCCATCGCGGCTCTGTTCCTCACCACCGAGGCCGTCGTCGCCGAC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1515 CTTCAAAATGCAGCTTCTGTAGCTAGTTGTTTTGACAACAGAAGCAGTTGTTGCTAAT 1574
    61
                               75
                                                                                        15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET:
                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                          TELEFAX: 206-269-0563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
GCCCTCGCAGACGCCGTAAAGGTGACGTTGGGCCCGAAGGGTCGCAACGTCGTGCTGGAG 120
                                                                                  ATGGCAAAAGAAATCGAAATTTTCAGCAGATGCGCGTGCTGCCATGGTGCGCGGAGTTGAT 74
                            ATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTGAA 134
                                                        ATGGCCAAGACAATTGCGTATGACGAAGAGGCCCGCGTGGCCTCGAGCGGGGCCTCAAC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59, Application US/08997362
5985287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ξÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hiyama, Jun
Visser, Elizabeth
Skinner, Margot
Scott, Linda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: Law Offices of Ann W. Speckman 2601 Elliott Avenue, Suite 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
                                                                                                                                                                                                          linear
                                                                                                                                26.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ross
                                                                                                                   <u>..</u>
                                                                                                                Score 446.8; DB 2;
Pred. No. 2.5e-122;
0; Mismatches 722;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AND DIAGNOSIS OF MYCOBACTERIAL INFECTIONS
                                                                                                                Indels
                                                                                                                                            Length 1626;
                                                                                                              .
O
                                                                                                                Gaps
                                                                                                                0
              밁
                                                                   Ġ
                                                                                              Š
                                                                                                                            밁
                                                                                                                                                      γ
                                                                                                                                                                                     밁
                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                      S
S
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωy
```

```
1141 GCTGCCACCGAGGTGGAGCTCAAGGAGCGCAAGCACCGCATCGAGGACGCCGTCCGCAAC 1200
                                                                                                                                                                                                                                                                                                                                 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       735 ACCAACCGTCCATTACTCATTATTGCAGATGATGTGGATGGTGAAGCACTTCCAACCCTT 794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              555 ATGGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGTCTCAA 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              315 GAAGGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTGAA 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           255 AATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAAGCCATTGTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361 AAGGCTGTCGAGGCTGTCACCCAGTCGCTGCTGAAGTCGGCCAAGGAGGTCGAGACCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 CTGGAGGACCCGTACGAGAAGATCGGCGCTGAGCTGGTCAAAGAGGTCGCCAAGAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 AAGAAGTGGGGCGCCCCACGATCACCAACGATGGTGTGTCCATCGCCAAGGAGATCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   135 AAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCGAA
                                                                                     GCTCCAACAGAGAGAGAGCTTTAAAAAGAAATGAAACTTTCGCATTGAGGATGCTCTAAATGCT
                                                                                                                                                                                                                              GCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACTTCTGACTTTGACCGT 1094
                                                                                                                                                                                                                                                                                                            ATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAGCTATT 1034
                                                                                                                                                                                                                                                                                                                                                                                                         GAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCCTTGGACAGGCTGCTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATCGTCGTAAAGCTATGCTTGAAGACATTGCTATCTTGACAGGTGGTACAGTGATTACA 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGATTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCGGCAAGCCGCTGCTGATCATCGCCGAGGACGTCGAGGGCGAGGCCCTGTCCACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCAGCTCCAAGGTGTCGACCGTCAAGGATCTGCTCCCGCTGCTGGAGAAGGTCATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACGGATAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACTTGAGGAAGTTCTTAAA 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACTTCGTGACCGACGCCGAGCGCCAGGAAGCCGTCCTGGAGGATCCCTACATCCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAACCCCATTTATCTTAATC 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCGAGGCCATGGACAAGGTCGGCAACGAGGGTGTCATCACCGTCGAGGAGTCGAACACC 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGTGATTACCATCGAAGAATCTCGAGGT 554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGCAGATTTCTGCCACCGCGGCGATTTCCGCCGGCGACACCCCAGATCGGCGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAGCTATTGCTCAGGTCGCTGCAGTATCATCACGCTCTGAAAAAGTTGGAGAGTATATC 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGGCCTGCGCAACGTCGCAGCCGGCGCCAACCCGCTCGGCCTCAAGCGTGGCATCGAG
                                                                                                                                                                                     GCCGGCCGGGTGGCTCAGATCCGCGCCGAGATCGAGAACAGCGACTCCGACTACGACCGC 1080
                                                                                                                                                                                                                                                                                  GTCGTCGTCACCAAGGACGAGACCACCATCGTCGAGGGCTCGGGCGATTCCGATGCCATC
                                                                                                                                                                                                                                                                                                                                                                          GAAAGAGTCGGGCTGTCCCTGGAGACCGCCGACGTCTCGCTGCTGGGCCAGGCCCGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGGTCAACAAGATCCGCGGCACCTTCAAGTCCGTCGCCGTCAAGGCTCCGGGCTTCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCGGCCTGCAGCTCGAGCTCACCGAGGGTATGCGCTTCGACAAGGGCTACATCTCGGGT 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTAGAAGATCATTTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAACC
                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              854
                                                                                                                                                                                                                                                                                                                                                                             960
                                                                                                                                                                                                                                                                                                                                                                                                                           974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          194
```

```
US-09-095-855-159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:

APPLICANT: Tan, Paul
APPLICANT: Visser, Elizabeth
APPLICANT: Skinner, Margot
APPLICANT: Skinner, Margot
APPLICANT: Prestidge, Ross
TITLE OF INVENTION: Compounds ar
TITLE OF INVENTION: Treatment ar
NUMBER OF EEQUENCES: 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 159, Application US/09095855 Patent No. 6160093
                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/705,347
FILING DATE: 29-AUG-1996
APPLICATION NUMBER: 08/873,970
FILING DATE: 12-JUN-1997
APPLICATION NUMBER: 08/997,362
FILING DATE: 23-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: Sleath, Janet
REGISTRATION NUMBER: 37,007
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                  SOFTWARE: FBSTSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/095,855
FILING DATE:
                                                    TELEPHONE: 206-269-0565
                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1215 ACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCACTTATTACGGTT
                                                                                          REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 11
                                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAACCTGAACCAGCTACGCCAGCGCCAGCAATGCCAGCAGGT 1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCAGAACGCGGCGTCCATCGCGGCTCTTCTTCCTCACCACCGAGGCCGTCGTCGCCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTCAAAATGCAGCTTCTGTAGCTAGTCTTATTTTGACAACAGAAGCAGTTGTTGCTAAT 1574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGTACGAGGACCTGCTCAAGGCCGGCGTCGCCGACCCGGTGAAGGTCACCCGCTCGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGATCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCGTTGCCGAGAAGGTGTCCAACCTGCCCGCGGGTCACGGCCTCAACGCCGCGACCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAACAGGT 1454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCGTGGCGCTCCGCTCCAAGCAGATCGCCTTCAACGGCGGCCTGGAGCCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAGGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTCCTGCGCTGGACGACCTCGGCCTGACGGGCGACGACGCCACCGGTGCCAACATCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTGAAAAAGTAGCAGCTCTTGAGCTTGAGGGCGATGATGCTACTGGACGTAACATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCGAAGGCTGCCGTCGAAGAGGGCATCGTCGCCGGTGGCGGCGTGGCTCTGCTGCAGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                       98121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ₩Ã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2601 Elliott Avenue,
                                       206-269-0563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Law Offices of Ann W. Speckman
)1 Elliott Avenue, Suite 4185
 159:
                                                                                          11000.1002c3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Methods for
Diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of Mycobacterial Infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1500
```

```
Š
                                      밁
                                                                      Š
                                                                                                              밁
                                                                                                                                            Ş
                                                                                                                                                                                    밁
                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;; TYPE: nucleic acid;
;; STRANDEDNESS: single;
TOPOLOGY: linear
US-09-095-855-159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Sim
Matches 880;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 1626 base pairs
    915
                                                                                                              781
                                                                                                                                                                                    721
                                                                                                                                                                                                                      735
                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                795
                                                                                                                                                                                                                                                                                                                                                                615 TACATGGTCACAGACAATGAAAAAATGGTTGCAGACCTTGAAAACCCATTTATCTTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                495 TCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGTGATTACCATCGAAGAATCTCGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    435 GAAGCTATTGCTCAGGTCGCTGCAGTATCATCACGCTCTGAAAAAGTTGGAGAGTATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    315 GAAGGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTGAA 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            255 AATGATATTGCTGGTGATGGGÄCGACTACTGCAACAGTTTTTGACACAAGCCATTGTTCAT 314
                                                                                                                                                                                                                                                                                                                                                                                                    541 TTCGGCCTGCAGCTCGAGCTCACCGAGGGTATGCGCTTCGACAAGGGCTACATCTCGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                        555 ATGGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGTCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421 GAGCAGATTTCTGCCACCGCGGCGATTTCCGCCGGCGACACCCCAGATCGGCGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361 AAGGCTGTCGAGGCTGTCACCCAGTCGCTGCTGAAGTCGGCCAAGGAGGTCGAGACCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 GAAGGCCTGCGCAACGTCGCAGCCGGCGCCAACCCGCTCGGCCTCAAGCGTGGCATCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 CTGGAGGACCCGTACGAGAAGATCGGCGCTGAGCTGGTCAAAGAGGTCGCCAAGAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      195 TTAGAAGATCATTTTGAAAAACATGGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 AAGAAGTGGGGGGCGCCCCACGATCACCAACGATGGTGTGTCCATCGCCAAGGAGATCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  75 ATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTGAA 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15 ATGGCAAAAGAAATCAAATTTTCAGCAGATGCGCGTGCTGCCATGGTGCGCGGAGTTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ATGGCCAAGACAATTGCGTATGACGAAGAGGCCCGCCGTGGCCTCGAGCGGGGCCTCAAC
                                                                                                                                                                                                                                                                                ACGGATAAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACTTGAGGAAGTTCTTAAA
GAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCTGCTAAG 974
                                                            GATCGTCGTAAAGCTATGCTTGAAGACATTGCTATCTTGACAGGTGGTACAGTGATTACA
                                                                                                        GTGGTCAACAAGATCCGCGGCACCTTCAAGTCCGTCGCCGTCAAGGCTCCGGGCTTCGGT
                                                                                                                                                                                                                    ACCAACCGTCCATTACTCATTATTGCAGATGATGTGGATGGTGAAGCACTTCCAACCCTT
                                                                                                                                                                                                                                                        GTCAGCTCCAAGGTGTCGACCGTCAAGGATCTGCTCCCGCTGCTGGAGAAGGTCATCCAG
                                                                                                                                                                                                                                                                                                                              TACTTCGTGACCGACGCCGAGCGCCAGGAAGCCGTCCTGGAGGATCCCTACATCCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCGAGGCCATGGACAAGGTCGCCAACGAGGGTGTCATCACCGTCGAGGAGTCGAACACC
                                  GACCGCCGCAAGGCGATGCTGCAGGACATGGCCATCCTCACCGGTGGTCAGGTCGTCAGC
                                                                                                                                          GTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCGCCAGGATTTGGT
                                                                                                                                                                                GCCGGCAAGCCGCTGCTGATCATCGCCGAGGACGTCGAGGGCGAGGCCCTGTCCACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGCAACAGCAACAGCTGTTGAAAGCCTTTGAAAGCCATTGCTCAACCTGTATCTGGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCGAA 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCCTCGCAGACGCCGTAAAGGTGACGTTGGGCCCGAAGGGTCGCAACGTCGTGCTGGAG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26.9%;
54.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 446.8; DB 4;
Pred. No. 2.5e-122;
0; Mismatches 722;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                          840
                                                                                                                                              854
                                                                                                                                                                                                                    794
                                                                                                                                                                                                                                                                                          734
                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              434
                                                                                                                                                                                780
                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                  674
                                                                                                                                                                                                                                                                                                                                                                                                                                        614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
```

```
RESULT 14
US-08-997-080-113
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 113, Application US/08997080 Patent No. 5968524 GENERAL INFORMATION:
                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1455 GAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGATCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1035
                                                                                                                                                                                                                                                                                                                                   PPLICANT: WATSON, JAMES D.

APPLICANT: TAN, PAUL L.J.

ITLE OF INVENTION: METHODS AND

UMBER OF SEQUENCES: 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               106
              APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                         STREET: 2601 E
                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                              RRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACCTGAACCAGCTACGCCAGCGCCAGCAATGCCAGCAGGT 1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTCAAAATGCAGCTTCTGTAGCTAGTCTTATTTTGACAACAGAAGCAGTTGTTGCTAAT 1574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGTACGAGGACCTGCTCAAGGCCGGCGTCGCCGACCCGGTGAAGGTCACCCGCTCGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCAGAACGCGGCGTCCATCGCGGCCTCTGTTCCTCACCACCGAGGCCGTCGTCGCCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCGTTGCCGAGAAGGTGTCCAACCTGCCCGCGGGTCACGGCCTCAACGCCGCGACCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCGTCGTCACCAAGGACGAGACCACCATCGTCGAGGGCTCGGGCGATTCCGATGCCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAACAGGT 1454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTGAAAAAGTAGCAGCTCTTGAGCTTGAGGGCGATGATGCTACTGGACGTAACATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCCACTTATTACGGTT 1274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAAGCTGCAGGAGCGCCTGGCCAAGCTGGCCGGCGGTGTTGCGGTGATCAAGGCCGGA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGTAGCTGTTATCAAAGTAGGA 1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGCGTGGCGCTCGGCTCCAAGCAGATCGCCTTCAACGGCGGCCTGGAGCCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAGGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTCCTGCGCTGGACGACCTCGGCCTGACGGCGACGAGGCCACCGGTGCCAACATCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGAAGGCTGCCGTCGAAGAGGGCATCGTCGCCGGTGGCGGCGTGGCTCTGCTGCAGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTGCCACCGAGGTGGAGCTCAAGGAGCGCGCAAGCACCGCATCGAGGACGCCGTCCGCAAC 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAAATGCT 1214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCGGCCGGGTGGCTCAGATCCGCGCCGAGATCGAGAACAGCGACTCCGACTACGACCGC 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACTTCTGACTTTGACCGT 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTACAGTTGATAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAGCTATT 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAAGAGTCGGGCTGTCCCTGGAGACCGCCGACGTCTCGCTGGGCCAGGCCCGCAAG
                                                                                                                                                                                   98121
                                                                                                                                                                                                                           ¥
                                                                                                                                                                                                                                                                 2601 Elliott Avenue,
                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                 Law Offices of Ann W. Speckman
01 Elliott Avenue, Suite 4185
                                 US/08/997,080
                                                                                                                                                                                                                                                                                                                                                      COMPOUNDS FOR
                                                                                                                                                                                                                                                                                                                                                    THE TREATMENT OF IMMUNOLOGICALLY-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                          Ş
                                                                                       밁
                                                                                                                             Ş
                                                                                                                                                                            밁
                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: Genomic DNA US-08-997-080-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match
Best Local Similarity
Matches 866; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-269-0565
                                        675 ACGGATAAAAAAAGTGTCAAACATCCAAGACATTTTGCCACTACTTGAGGAAGTTCTTAAA 734
                                                                                                                          615 TACATGGTCACAGACAATGAAAAATGGTTGCAGACCTTGAAAACCCATTTATCTTAATC 674
                                                                                                                                                                     541 TTCGGCCTGCAGCTCGAGCTCACCGAGGGTATGCGCTTCGACAAGGGCTACATCTCGGGT 600
                                                                                                                                                                                                                    555
                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                    495 TCAGAAGCTATGGAGCGTGTGGGCAACGATGGTGTGATTACCATCGAAGAATCTCGAGGT
                                                                                                                                                                                                                                                                                                                                                                                            435
                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            315 GAAGGACTAAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTGAA 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      195 TTAGAAGATCATTTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                            421 GAGCAGATTTCTGCCACCGCGGCGATTTCCGCCGGCGACACCCAGATCGGCGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301 GAAGGCCTGCGCAACGTCGCAGCCGGCGCCAACCCGGCTCGGCCTCAAGCGTGGCATCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              255 AATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTGACACAAGCCATTGTTCAT 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 CTGGAGGACCCGTACGAGAAGATCGGCGCTGAGCTGGTCAAAGAGGTCGCCAAGAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 GCCCTCGCAGACGCCGTAAAGGTGACGTTGGGCCCGAAGGGTCGCAACGTCGTGCTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 ATGGCCAAGACAATTGCGTATGACGAAGAGGCCCGCCGTGGCCTCGAGCGGGGCCTCAAC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
GTCAGCTCCAAGGTGTCGACCGTCAAGGATCTGCTCCCGCTGCTGGAGAAGGTCATCCAG 720
                                                                                                                                                                                                                                                          GCCGAGGCCATGGACAAGGTCGGCAACGAGGGTGTCATCACCGTCGAGGAGTCGAACACC
                                                                                                                                                                                                               ATGGAAACAGAACTTGAAGTGGTTGAAGGCATGCAATTTGACCGTGGTTACCTGTCTCAA
                                                                                                                                                                                                                                                                                                                                                                                       GAAGCTATTGCTCAGGTCGCTGCAGTATCATCACGCTCTGAAAAAGTTGGAGAGTATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGCTGTCGAGGCTGTCACCCAGTCGCTGCTGAAGTCGGCCAAGGAGGTCGAGACCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGAAGTGGGGCGCCCCACGATCACCAACGATGGTGTGCCATCGCCAAGGAGATCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTGAA 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCAAAAGAAATCAAATTTTCAGCAGATGCGCGTGCTGCCATGGTGCGCGGAGTTGAT 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCGAA 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sleath, Janet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1569 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            206-269-0563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 444.8; DE
Pred. No. 9.4e-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11000.1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB
```

434 360

300

240

554 480 494 420 밁 Ş 밁 S

Ş 밁

8

Indels Length 1569;

0, Gaps

0,

밁 S 문 Š 문 8 Ş

```
Patent No. 3900-100:
GENERAL INFORMATION:
APPLICANT: Tan, Paul
APPLICANT: Hiyama, Jun
APPLICANT: Visser, Elizabeth
APPLICANT: Skinner, Margot
Inda
Torant: Scott, Linda
Toras
                                                                                                                                                               RESULT 15
US-08-997-362-113
Sequence 113, Application US/08997362
Patent No. 5985287
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                             ş
                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                               1501
                                                                                                                                                                                                                                                                                                                                                                                                              1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                 FITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                       1575 AAACCTGA 1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1035 GCTAACCGTATTGCACTGATTAAATCGCAATTAGAAACAACAACTTCTGACTTTGACCGT 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961 GTCGTCGTCACCAAGGACGAGACCACCATCGTCGAGGGCTCGGGCGATTCCGATGCCATC 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901 GAAAGAGTCGGGCTGTCCCTGGAGACCGCCGACGTCTCGCTGGTCTGGGCCAGGCCCGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          915. GAGGATCTAGGACTTGAATTAAAAGATGCTACAATGACAGCCCTTGGACAGGCTGCTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     855 GATCGTCGTAAAGCTATGCTTGAAGACATTGCTATCTTGACAGGTGGTACAGTGATTACA 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         735. ACCAACCGTCCATTACTCATTATTGCAGATGATGTGGATGGTGAAGCACTTCCAACCCTT
                                                                                                                                                                                                                                                                                                                                    CTGCAGAACGCGGCGTCCATCGCGGCTCTGTTCCTCACCACCGAGGCCGTCGTCGCCGAC 1560
                                                                                                                                                                                                                                                                                                                                                                                                     GAGTACGAGGACCTGCTCAAGGCCGGCGTCGCCGACCCGGTGAAGGTCACCCGCTCGGCG
                                                                                                                                                                                                                                                                         AAGCCGGA 1568
                                                                                                                                                                                                                                                                                                                                                              CTTCAAAATGCAGCTTCTGTAGCTAGTCTTATTTTGACAACAGAAGCAGTTGTTGCTAAT 1574
                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGTGGGTTGATATGATTAAAACAGGAATCATTGACCCTGTCAAAGTAACACGATCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTAGTTATTGACAAGTTGAAAAACAGCCCTGCAGGAACAGGATTTAATGCTGCAACAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTGAAAAAGTAGCAGCTCTTGAGCTTGAGGGCGATGATGCTACTGGACGTAACATTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTCCAACAGAGACAGCTTTAAAAGAAATGAAACTTCGCATTGAGGATGCTCTAAATGCT 1214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGAAGCTGCAGGAGCGCCTGGCCAAGCTGGCCGGCGGTGTTGCGGTGATCAAGGCCCGGA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCGTTGCCGAGAAGGTGTCCAACCTGCCGGGGTCACGGCCTCAACGCCGCGACCGGT 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGCGTGGCGCTGTCGGCTCAAGCAGATCGCCTTCAACGGCGGCCTGGAGCCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCGTGCTCTAGAAGAGCCTGTACGTCAAATTGCTTTAAATGCTGGGTACGAAGGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTCCTGCGCTGGACGACCTCGGCCTGACGGCGACGAGGCCACCGGTGCCAACATCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGAAGGCTGCCGTCGAAGAGGCATCGTCGCCGCTGCCGCGCGCTGCTGCTGCAGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACACGTGCAGCCGTTGAAGAAGGTATCGTTGCTGGTGGTGGAACAGCACTTATTACGGTT 1274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAAAACTACAAGAACGTTTGGCGAAATTAGCTGGTGGTGTGAGCTGTTATCAAAGTAGGA 1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGCCACCGAGGTGGAGCTCAAGGAGCGCCAAGCACCGCATCGAGGACGCCGTCCGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCGGCCGGGTGGCTCAGATCCGCGCCGAGATCGAGAACAGCGACTCCGACTACGACCGC 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTACAGTTGATAAAAGATAGCACAGTAATTGTTGAAGGTTCAGGAAGTTCAGAAGCTATT 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACCGCCGCAAGGCGATGCTGCAGGACATGGCCATCCTCACCGGTGGTCAGGTCGTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGGTCAACAAGATCCGCGGCACCTTCAAGTCCGTCGCCGTCAAGGCTCCGGGCTTCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCTTGAACAAGATTCGTGGTACTTTCAATGTGGTTGCTGTCAAAGCCCCCAGGATTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCGGCAAGCCGCTGCTGATCATCGCCGAGGACGTCGAGGGCGAGGCCCTGTCCACGCTG
Scott, Linua
Prestidge, Ross
Prestidge, Ross
Prestidge, Ross
Ross AND METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1454
                                                                                                                                                                                                                                                                                                                                                                                                       1500
                                                                                                                                                                                                                                                                                                                                                                                                                                         1514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       794
```

```
Ş
                                                                 밁
                                                                                            S
                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; STRANDEDNESS:
; TOPOLOGY: line
; MOLECULE TYPE: G
US-08-997-362-113
                                                                                                                                                       S
                                                                                                                                                                                       ₽
                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 866;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:

APPLICATION NUMBER: U.S. Paten
FILING DATE: June 12, 1997
APPLICATION NUMBER: U.S. Paten
FILING DATE: August 29, 1996
ATTORNEY/AGENT INFORMATION:
NAME: Sleath, Janet
REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 11000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-269-0565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCE.
CORRESPONDENCE ADDRESS:
CORRESPONDENCE Law Offices of Ann
""" FIliott Avenue,
                                   375
                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                            241
                                                                                                                                          255 AATGATATTGCTGGTGATGGGACGACTACTGCAACAGTTTTTGACACAAGCCATTGTTCAT
                                                                                                                                                                                 181 CTGGAGGACCCGTACGAGAAGATCGGCGCTGAGCTGGTCAAAGAGGTCGCCAAGAAGACC
                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                       135 AAAGCTTTTGGTTCTCCCTTAATTACTAATGACGGGGTAACCATTGCTAAAGAGATCGAA 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
                                                                                                                                                                                                                      195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 2601 E. CITY: Seattle STATE: WA
                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                              75
                                                                                                                                                                                                                                                                                                                                                                                        15 ATGGCAAAAAATCAAATTTTCAGCAGATGCGCGTGCTGCCATGGTGCGCGGAGTTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucl
                                                                                                                                                                                                                                                                                                                                                                  1 ATGGCCAAGACAATTGCGTATGACGAAGAGGCCCGCCGTGGCCTCGAGCGGGGCCTCAAC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 206-269-0563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM Compatible OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                      GAAGGACTAAAAATGTGACAGCAGGTGCTAATCCAATTGGTATCCGTCGAGGCATTGAA 374
                                                                                                                    GCCCTCGCAGACGCCGTAAAGGTGACGTTGGGCCCGAAGGGTCGCAACGTCGTGCTGGAG
                           ACAGCAACAGCAACAGCTGTTGAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGGCAAG 434
                                                         GAAGGCCTGCGCAACGTCGCAGCCGGCGCCAACCCGCTCGGCCTCAAGCGTGGCATCGAG
                                                                                                                                                                                                                                            AAGAAGTGGGGGGCCCCCACGATCACCAACGATGGTGTGTCCATCGCCAAGGAGATCGAG 180
AAGGCTGTCGAGGCTGTCACCCAGTCGCTGCTGAAGTCGGCCAAGGAGGTCGAGACCAAG
                                                                                                                                                                                                             TTAGAAGATCATTTTGAAAACATGGGAGCAAAATTGGTGTCTGAAGTGGCTTCTAAAACC
                                                                                                                                                                                                                                                                                                                         ATGTTAGCAGATACCGTCAAAGTAACGCTTGGTCCTAAAGGGCGCAATGTTGTTCTTGAA 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1569 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             leic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            single
                                                                                                                                                                                                                                                                                                                                                                                                                                                   26.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TREATMENT AND DIAGNOSIS OF MYCOBACTERIAL INFECTIONS: 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               37,007
3ER: 11000.1002c2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/997,362
                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent Application No.
                                                                                                                                                                                                                                                                                                                                                                                                                                Score 444.8; DB 2;
Pred. No. 9.4e-122;
0; Mismatches 702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Suite 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             No.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5985287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5985287 08/873,970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08/705,347
                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
420
                                                           360
                                                                                                                       300
                                                                                                                                                  314
                                                                                                                                                                                  240
                                                                                                                                                                                                               254
                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

В

Ş 밁 밁

ઠ

밁

```
Qy
                                                     Db 1501 CTGCAGAACGCGGCTCCATCGCGGCCTCTGTTCCTCACCACGAGGCCGTCGTCGCCGAC 1560
1575 AAACCTGA 1582
|| || ||
1561 AAGCCGGA 1568
```

Search completed: November 9, 2001, 11:32:49
Job time: 6025 sec

망